



# **STIC Search Report**

## **Biotech-Chem Library**

**STIC Database Tracking Number: 151709**

**TO: Cybille Delacroix  
Location: REM-3A78&3C70  
Art Unit: 1614  
Tuesday, April 26, 2005**

**Case Serial Number: 09/927038**

**From: Paul Schulwitz  
Location: Biotech-Chem Library  
REM-1A65  
Phone: 571-272-2527**

**[paul.schulwitz@uspto.gov](mailto:paul.schulwitz@uspto.gov)**

### **Search Notes**



# STIC SEARCH RESULTS FEEDBACK FORM

## Biotech-Chem Library

Questions about the scope or the results of the search? Contact *the searcher or contact*:

Mary Hale, Information Branch Supervisor  
Remsen Bldg. 01 D86  
571-272-2507

## Voluntary Results Feedback Form

➤ I am an examiner in Workgroup:  Example: 1610

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC-Biotech-Chem Library Remsen Bldg.



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Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: C. Delacruz Examiner #: 7100 Date: 4-26-05  
Art Unit: 1614 Phone Number: 2-0572 Serial Number: 09/927,038  
Location (Bldg/Room#): 3A78 (Mailbox #): 3270 Results Format Preferred (circle) PAPER DISK  
\*\*\*\*\*

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Date: \_\_\_\_\_

Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search claims 4, 9, 11, 14. Key terms are highlighted.

encephalic ischemia ~ brain ischemia

Thanks

Please rush

Rush Search Approved

TK Page  
SPE, A 1615

RECEIVED  
APR 26 2005  
INFORMATION DIVISION  
(STIC)

STAFF USE ONLY

Searcher: \_\_\_\_\_

Searcher Phone #: \_\_\_\_\_

Searcher Location: \_\_\_\_\_

Date Searcher Picked Up: \_\_\_\_\_

Date Completed: 4/26

Searcher Prep & Review Time: 20

Online Time: 10

Type of Search

\_\_\_\_ NA Sequence (#)

\_\_\_\_ AA Sequence (#)

2 Structure (#)

\_\_\_\_ Bibliographic

\_\_\_\_ Litigation

\_\_\_\_ Fulltext

\_\_\_\_ Other

Vendors and cost where applicable

505.67 STN \_\_\_\_\_ Dialog

\_\_\_\_ Questel/Orbit \_\_\_\_\_ Lexis/Nexis

\_\_\_\_ Westlaw \_\_\_\_\_ WWW/Internet

In-house sequence systems

\_\_\_\_ Commercial \_\_\_\_\_ Oligomer \_\_\_\_\_ Score/Length  
\_\_\_\_ Interference \_\_\_\_\_ SPDI \_\_\_\_\_ Encode/Transl  
\_\_\_\_ Other (specify)

LISTING OF CLAIMSIn the Claims:

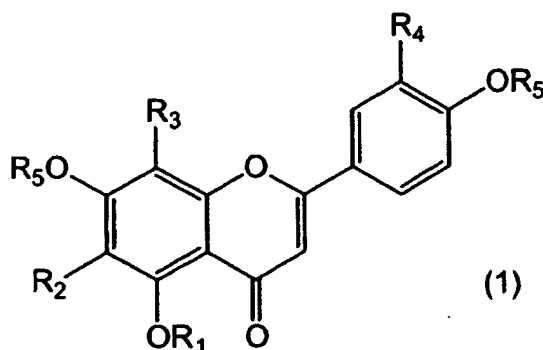
Please amend the claims in the below-indicated manner. This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (cancelled)

2. (cancelled)

3. (cancelled)

4. (previously presented) A method for extending neurites comprising administering a composition to a subject, the composition comprising an extract from a plant belonging to the citrus family, wherein the extract from a plant belonging to the citrus family comprises a polyalkoxyflavonoid represented by Formula 1:



wherein R<sub>1</sub> is H or a lower alkyl group of C<sub>1</sub> to C<sub>6</sub>; R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are each independently H or an alkoxy group of C<sub>1</sub> to C<sub>6</sub>; and R<sub>5</sub> is a lower alkyl group of C<sub>1</sub> to C<sub>6</sub>.

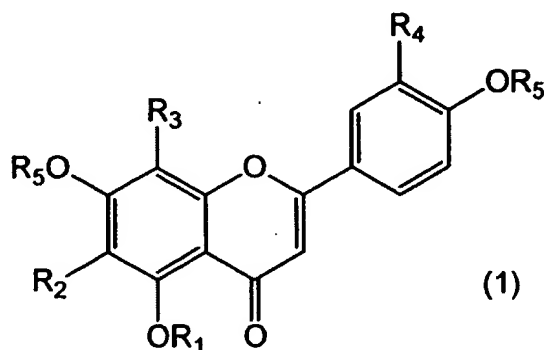
5. (original) The method of claim 4, wherein the polyalkoxyflavonoid is nobiletin or tangeretin.

6. (cancelled)

7. (cancelled)

8. (cancelled)

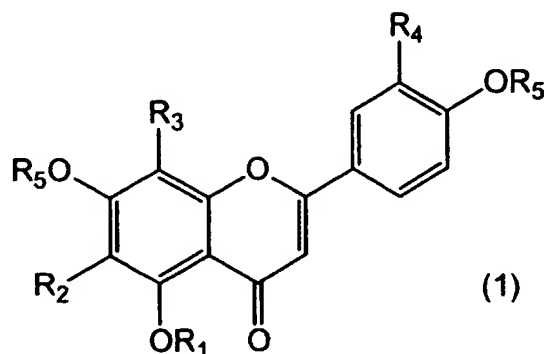
9. (currently amended) A method for treating neurodegeneration diseases encephalic ischemia comprising administering a composition to a subject, the composition comprising an extract from a plant belonging to the citrus family, and a pharmaceutically acceptable carrier or a food material, wherein the extract from a plant belonging to the citrus family comprises a polyalkoxyflavonoid represented by Formula 1:



wherein R<sub>1</sub> is H or a lower alkyl group of C<sub>1</sub> to C<sub>6</sub>; R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are each independently H or an alkoxy group of C<sub>1</sub> to C<sub>6</sub>; and R<sub>5</sub> is a lower alkyl group of C<sub>1</sub> to C<sub>6</sub>.

10. (original) The method of claim 9, wherein the polyalkoxyflavonoid is nobiletin or tangeretin.

11. (original) A method for extending neurites comprising bringing a composition in contact with neurocytes, the composition comprising a polyalkoxyflavonoid represented by Formula 1, and a physiologically acceptable carrier:

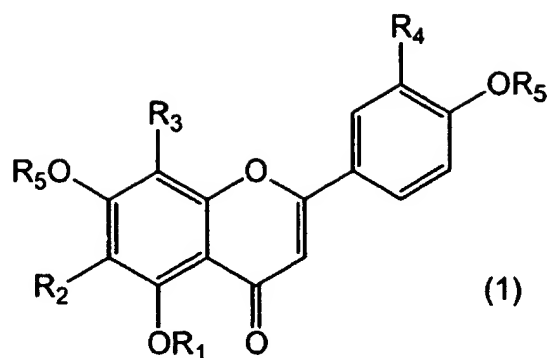


wherein  $R_1$  is H or a lower alkyl group of  $C_1$  to  $C_6$ ;  $R_2$ ,  $R_3$  and  $R_4$  are each independently H or an alkoxy group of  $C_1$  to  $C_6$ ; and  $R_5$  is a lower alkyl group of  $C_1$  to  $C_6$ .

12. (original) The method of claim 11, wherein the polyalkoxyflavonoid is nobiletin or tangeretin.

13. (cancelled)

14. (previously presented) A method for extending neurites comprising bringing a composition in contact with neurocytes, the composition comprising an extract from a plant belonging to the citrus family, wherein the extract from a plant belonging to the citrus family comprises polyalkoxyflavonoid represented by Formula 1:



wherein  $R_1$  is H or a lower alkyl group of  $C_1$  to  $C_6$ ;  $R_2$ ,  $R_3$  and  $R_4$  are each independently H or an alkoxy group of  $C_1$  to  $C_6$ ; and  $R_5$  is a lower alkyl group of  $C_1$  to  $C_6$ .

15. (original) The method of claim 14, wherein the polyalkoxyflavonoid is nobiletin or tangeretin.

=> d his full

(FILE 'HOME' ENTERED AT 14:22:32 ON 26 APR 2005)

FILE 'REGISTRY' ENTERED AT 14:22:39 ON 26 APR 2005

L1 STR  
L2 23 SEA SSS SAM L1  
L3 869 SEA SSS FUL L1  
E NOBILETIN/CN  
L4 1 SEA ABB=ON PLU=ON NOBILETIN/CN  
L5 1 SEA ABB=ON PLU=ON L4 AND L3  
E TANGERETIN/CN  
L6 1 SEA ABB=ON PLU=ON TANGERETIN/CN  
L7 1 SEA ABB=ON PLU=ON L3 AND L6

FILE 'HCAPLUS' ENTERED AT 14:26:14 ON 26 APR 2005

L8 2988 SEA ABB=ON PLU=ON L3  
L9 450 SEA ABB=ON PLU=ON L3 (L) (BAC OR DMA OR PAC OR PKT OR THU)/RL  
E NEURITES/CT  
E US2001-927038/APPS  
L10 1 SEA ABB=ON PLU=ON US2001-927038/AP  
L11 1 SEA ABB=ON PLU=ON L3 AND L10  
D IALL HITSTR  
E ISCHEMIA/CT  
E E3+ALL  
L12 46728 SEA ABB=ON PLU=ON ISCHEMIA+PFT,NT/CT  
E BRAIN  
E BRAIN/CT  
E BRAIN, DISEASE/CT  
E E3+ALL  
L13 15201 SEA ABB=ON PLU=ON BRAIN, DISEASE+PFT/CT(L) (ISCHEMIA OR  
NEURITE)  
L14 71336 SEA ABB=ON PLU=ON ISCHEMIA OR NEURITE  
E ALZHEIMER/CT  
E E9+ALL  
L15 18051 SEA ABB=ON PLU=ON "ALZHEIMER'S DISEASE"+PFT,NT/CT  
E NEUROCYTES/CT  
E E2+ALL  
E E2+ALL  
L16 380 SEA ABB=ON PLU=ON NEUROCYT?  
L17 88163 SEA ABB=ON PLU=ON L12 OR L13 OR L14 OR L15 OR L16  
L18 8 SEA ABB=ON PLU=ON L9 AND L17  
D QUE

FILE 'MEDLINE, EMBASE, BIOSIS, USPATFULL, USPAT2' ENTERED AT 14:33:16 ON  
26 APR 2005

L19 972 SEA ABB=ON PLU=ON L3  
L20 76 SEA ABB=ON PLU=ON L19 AND (ALZHEIM? OR NEUROCYT? OR NEURITE?  
OR ISCHEM? OR BRAIN OR NEUR? OR NERVOUS SYSTEM)

FILE 'HCAPLUS, MEDLINE, EMBASE, BIOSIS, USPATFULL, USPAT2' ENTERED AT  
14:35:17 ON 26 APR 2005

L21 76 DUP REM L18 L20 (8 DUPLICATES REMOVED)  
ANSWERS '1-8' FROM FILE HCAPLUS  
ANSWERS '9-14' FROM FILE MEDLINE  
ANSWERS '15-25' FROM FILE EMBASE  
ANSWERS '26-35' FROM FILE BIOSIS



L22                   ANSWERS '36-76' FROM FILE USPATFULL  
69 DUP REM L20 (7 DUPLICATES REMOVED)  
                  ANSWERS '1-6' FROM FILE MEDLINE  
                  ANSWERS '7-17' FROM FILE EMBASE  
                  ANSWERS '18-27' FROM FILE BIOSIS  
                  ANSWERS '28-69' FROM FILE USPATFULL  
L23                   77 SEA ABB=ON PLU=ON L21 OR L22  
                  D QUE L21

FILE 'HCAPLUS' ENTERED AT 14:36:56 ON 26 APR 2005  
D QUE L21  
D QUE L21  
D QUE L18  
D L18 IBIB ABS HITIND HITSTR 1-8

FILE 'MEDLINE, EMBASE, BIOSIS, USPATFULL, USPAT2' ENTERED AT 14:38:58 ON  
26 APR 2005  
D QUE L21

FILE 'HCAPLUS, MEDLINE, EMBASE, BIOSIS, USPATFULL' ENTERED AT 14:39:19 ON  
26 APR 2005  
D L21 BIB AB 9-76

FILE 'MEDLINE, EMBASE, BIOSIS, USPATFULL, USPAT2' ENTERED AT 14:39:22 ON  
26 APR 2005

FILE HOME

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 25 APR 2005 HIGHEST RN 849177-50-0  
DICTIONARY FILE UPDATES: 25 APR 2005 HIGHEST RN 849177-50-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

## FILE HCAPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 26 Apr 2005 VOL 142 ISS 18

FILE LAST UPDATED: 25 Apr 2005 (20050425/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

## FILE MEDLINE

FILE LAST UPDATED: 23 APR 2005 (20050423/UP). FILE COVERS 1950 TO DATE.

On December 19, 2004, the 2005 MeSH terms were loaded.

The MEDLINE reload for 2005 is now available. For details enter HELP RLOAD at an arrow prompt (=>). See also:

<http://www.nlm.nih.gov/mesh/>

[http://www.nlm.nih.gov/pubs/techbull/nd04/nd04\\_mesh.html](http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html)

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2005 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

## FILE EMBASE

FILE COVERS 1974 TO 21 Apr 2005 (20050421/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

## FILE BIOSIS

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 20 April 2005 (20050420/ED)

FILE RELOADED: 19 October 2003.

## FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 26 Apr 2005 (20050426/PD)  
FILE LAST UPDATED: 26 Apr 2005 (20050426/ED)  
HIGHEST GRANTED PATENT NUMBER: US6886181  
HIGHEST APPLICATION PUBLICATION NUMBER: US2005086720  
CA INDEXING IS CURRENT THROUGH 26 Apr 2005 (20050426/UPCA)  
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 26 Apr 2005 (20050426/PD)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2005  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2005

>>> USPAT2 is now available. USPATFULL contains full text of the <<<  
>>> original, i.e., the earliest published granted patents or <<<  
>>> applications. USPAT2 contains full text of the latest US <<<  
>>> publications, starting in 2001, for the inventions covered in <<<  
>>> USPATFULL. A USPATFULL record contains not only the original <<<  
>>> published document but also a list of any subsequent <<<  
>>> publications. The publication number, patent kind code, and <<<  
>>> publication date for all the US publications for an invention <<<  
>>> are displayed in the PI (Patent Information) field of USPATFULL <<<  
>>> records and may be searched in standard search fields, e.g., /PN, <<<  
>>> /PK, etc. <<<

>>> USPATFULL and USPAT2 can be accessed and searched together <<<  
>>> through the new cluster USPATALL. Type FILE USPATALL to <<<  
>>> enter this cluster. <<<  
>>> <<<  
>>> Use USPATALL when searching terms such as patent assignees, <<<  
>>> classifications, or claims, that may potentially change from <<<  
>>> the earliest to the latest publication. <<<

This file contains CAS Registry Numbers for easy and accurate  
substance identification.

#### FILE USPAT2

FILE COVERS 2001 TO PUBLICATION DATE: 26 Apr 2005 (20050426/PD)  
FILE LAST UPDATED: 26 Apr 2005 (20050426/ED)  
HIGHEST GRANTED PATENT NUMBER: US2005005595  
HIGHEST APPLICATION PUBLICATION NUMBER: US2005085360  
CA INDEXING IS CURRENT THROUGH 26 Apr 2005 (20050426/UPCA)  
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 26 Apr 2005 (20050426/PD)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2005  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2005

USPAT2 is a companion file to USPATFULL. USPAT2 contains full text  
of the latest US publications, starting in 2001, for the inventions  
covered in USPATFULL. USPATFULL contains full text of the original  
published US patents from 1971 to date and the original applications  
from 2001. In addition, a USPATFULL record for an invention contains  
a complete list of publications that may be searched in standard  
search fields, e.g., /PN, /PK, etc.

USPATFULL and USPAT2 can be accessed and searched together through  
the new cluster USPATALL. Type FILE USPATALL to enter this cluster.

Use USPATALL when searching terms such as patent assignees,  
classifications, or claims, that may potentially change from the  
earliest to the latest publication.

L11 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2002:148735 HCAPLUS  
DOCUMENT NUMBER: 136:164277  
ENTRY DATE: Entered STN: 26 Feb 2002  
TITLE: Neurite outgrowth factor in Rutaceae extract  
INVENTOR(S): Ito, Hisatomi; Tamura, Shinya; Miyazaki, Toshiji  
PATENT ASSIGNEE(S): Nagase and Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent  
LANGUAGE: Japanese

INT. PATENT CLASSIF.:  
MAIN: A61K031-352  
SECONDARY: A23L001-30; A61K035-78; A61P009-10; A61P025-00;  
A61P025-28; A61P043-00; C07D311-30

CLASSIFICATION: 11-1 (Plant Biochemistry)  
Section cross-reference(s): 1, 17

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002060340	A2	20020226	JP 2000-248021	20000817
US 2002040052	A1	20020404	US 2001-927038	20010809 <--
			JP 2000-248021	A 20000817

PRIORITY APPLN. INFO.:

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2002060340	ICM	A61K031-352
	ICS	A23L001-30; A61K035-78; A61P009-10; A61P025-00; A61P025-28; A61P043-00; C07D311-30
US 2002040052	NCL	514/456.000
	ECLA	A61K031/352; A61K035/78 <--

OTHER SOURCE(S): MARPAT 136:164277

ABSTRACT:

Polyalkoxyflavonoids, especially nobiletin and tangeretin, in the Rutaceae extract are useful for control and relief of neurodegenerative diseases such as cerebral ischemia. Dried peel of Citrus unshiu was extracted with ethanol and nobiletin and tangeretin identified in the extract by known method. Biol. activity of the Citrus unshiu extract on the PC12 cell was shown.

SUPPL. TERM: Rutaceae ext neurite outgrowth factor neurodegenerative disease; polyalkoxyflavonoid neurodegenerative disease control Rutaceae ext

INDEX TERM: Ischemia  
(cerebral; neurite outgrowth agent)

INDEX TERM: Nervous system, disease  
(degeneration; neurite outgrowth agent)

INDEX TERM: Brain, disease  
(ischemia; neurite outgrowth agent)

INDEX TERM: Growth factors, animal

ROLE: PUR (Purification or recovery); THU (Therapeutic use);  
BIOL (Biological study); PREP (Preparation); USES (Uses)  
(neurite extension factors; neurite outgrowth agent)

INDEX TERM: Alzheimer's disease  
Citrus aurantium

Citrus depressa  
Drugs  
Health food  
Rutaceae  
Satsuma  
(neurite outgrowth agent)

INDEX TERM: Flavonoids  
ROLE: PUR (Purification or recovery); THU (Therapeutic use);  
BIOL (Biological study); PREP (Preparation); USES (Uses)  
(polyalkoxyflavonoids; neurite outgrowth agent)

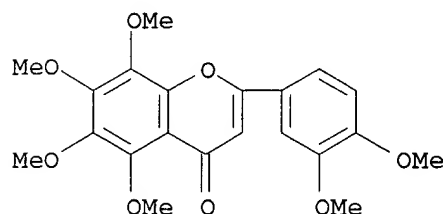
INDEX TERM: 64-17-5, Ethanol, uses  
ROLE: NUU (Other use, unclassified); USES (Uses)  
(neurite outgrowth agent)

INDEX TERM: **478-01-3P**, Nobiletin **481-53-8P**, Tangeretin  
ROLE: PUR (Purification or recovery); THU (Therapeutic use);  
BIOL (Biological study); PREP (Preparation); USES (Uses)  
(neurite outgrowth agent)

IT **478-01-3P**, Nobiletin **481-53-8P**, Tangeretin  
RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(neurite outgrowth agent)

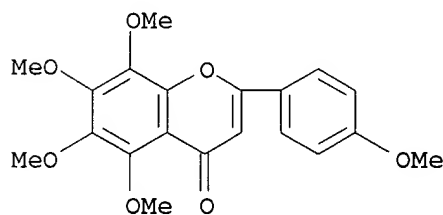
RN 478-01-3 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7,8-tetramethoxy- (9CI)  
(CA INDEX NAME)



RN 481-53-8 HCAPLUS

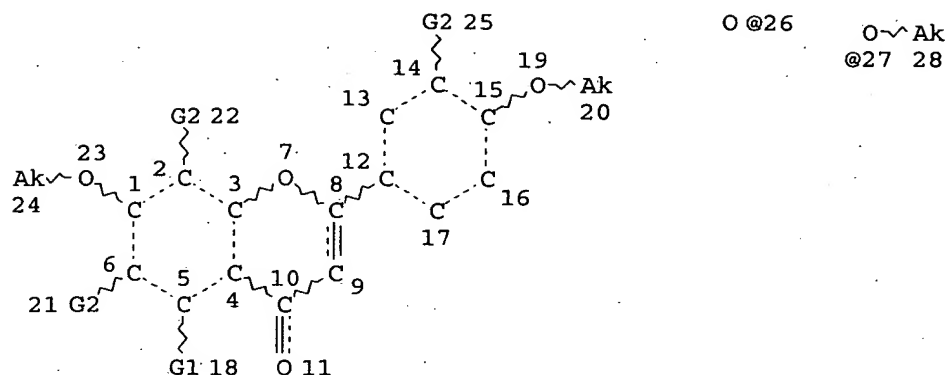
CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI)  
(CA INDEX NAME)



=&gt; d que 118

L1

STR



VAR G1=26/27

VAR G2=H/27

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 20

CONNECT IS E1 RC AT 24

CONNECT IS E1 RC AT 26

CONNECT IS E1 RC AT 28

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE

L3 869 SEA FILE=REGISTRY SSS FUL L1

L9 450 SEA FILE=HCAPLUS ABB=ON PLU=ON L3 (L) (BAC OR DMA OR PAC OR PKT OR THU)/RL

L12 46728 SEA FILE=HCAPLUS ABB=ON PLU=ON ISCHEMIA+PFT,NT/CT

L13 15201 SEA FILE=HCAPLUS ABB=ON PLU=ON BRAIN, DISEASE+PFT/CT(L) (ISCHE MIA OR NEURITE)

L14 71336 SEA FILE=HCAPLUS ABB=ON PLU=ON ISCHEMIA OR NEURITE

L15 18051 SEA FILE=HCAPLUS ABB=ON PLU=ON "ALZHEIMER'S DISEASE"+PFT,NT/C T

L16 380 SEA FILE=HCAPLUS ABB=ON PLU=ON NEUROCYT?

L17 88163 SEA FILE=HCAPLUS ABB=ON PLU=ON L12 OR L13 OR L14 OR L15 OR L16

L18 8 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L17

=&gt; d l18 ibib abs hitind hitstr 1-8

L18 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:462814 HCAPLUS

DOCUMENT NUMBER: 141:17635

TITLE: Method of treating neurological diseases and etiologically related symptomology using carbonyl trapping agents in combination with medicaments

INVENTOR(S): Shapiro, Howard K.

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 33 pp., Cont.-in-part of U.S. Ser. No. 883,290,

abandoned.  
 CODEN: USXXAM  
 Patent  
 English

DOCUMENT TYPE:

LANGUAGE:

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6746678	B1	20040608	US 2000-545870	20000406
US 5668117	A	19970916	US 1993-62201	19930629
PRIORITY APPLN. INFO.:			US 1991-660561	B1 19910222
			US 1993-26617	B2 19930223
			US 1993-62201	A2 19930629
			US 1997-883290	B2 19970626

OTHER SOURCE(S): MARPAT 141:17635

AB The invention discloses a method for treatment of several neurol. diseases and pathophysiol. related symptomol., the diseases including peripheral neuropathies, secondary symptomol. of diabetes, Alzheimer's disease, Parkinson's disease, alc. polyneuropathy and age-onset symptomol., as well as analogous veterinary disease states. An opportunity exists for pharmacol. intervention in some neurol. diseases by use of water-soluble, small-mol.-weight primary amine agents and chemical derivs. thereof. Examples of such primary pharmacol. agents include 4-aminobenzoic acid and derivs. thereof. The invention also includes: (1) oral use of optional nonabsorbable polyamine polymeric co-agents, e.g. chitosan, (2) oral use of optional known antioxidant co-agents and related nutritional factors, and (3) use of the primary agents and above co-agents in optional combination with medicaments recognized as effective for treatment of the diseases addressed herein or symptoms thereof.

IC ICM A61K009-00

ICS A61K009-20; A61K006-48; A01N037-44

INCL 424400000; 424464000; 424451000; 514565000; 514561000; 514567000

CC 1-11 (Pharmacology)

Section cross-reference(s): 63

IT Aging, animal

Alzheimer's disease

Anti-Alzheimer's agents

Antioxidants

Antiparkinsonian agents

Atherosclerosis

Carbonyl group

Cardiovascular agents

Cardiovascular system, disease

Down's syndrome

Human

Kidney, disease

Medicago sativa

Multiple sclerosis

Nervous system, disease

Nervous system agents

Parkinson's disease

Petroselinum crispum

Watercress

Yeast

(carbonyl trapping agents in combination with medicaments for treatment of neurol. diseases and etiol. related symptomol.)

IT 50-14-6, Vitamin D2 52-90-4, Cysteine, biological studies 54-47-7,  
 Pyridoxal 5-phosphate 57-50-1D, Sucrose, polyesters, derivs. 58-05-9,

Folinic acid 58-56-0, Pyridoxine hydrochloride 58-85-5, Biotin 59-02-9,  $\alpha$ -Tocopherol 59-30-3, Folic acid, biological studies 59-43-8, Vitamin B1, biological studies 59-51-8, Methionine 59-58-5, Thiamine propyl disulfide 59-67-6, Nicotinic acid, biological studies 60-23-1, Cysteamine 63-68-3, L-Methionine, biological studies 65-22-5, Pyridoxal hydrochloride 65-85-0D, Benzoic acid, derivs. 66-72-8, Pyridoxal 67-16-3, Thiamine disulfide 67-97-0, Vitamin D3 68-19-9, Vitamin B12 68-26-8, Retinol 74-31-7, N,N'-Diphenyl-p-phenylenediamine 77-92-9, Citric acid, biological studies 79-17-4D, Aminoguanidine, cellulose derivs. 79-83-4, Pantothenic acid 83-68-1, Vitamin K6 83-69-2, Vitamin K7 83-70-5, Vitamin K5 83-88-5, Vitamin B2, biological studies 84-81-1, Vitamin K2(30) 85-87-0, Pyridoxamine 91-53-2, Ethoxyquin 91-86-1,  $\eta$ -Tocopherol 98-92-0, Niacinamide 103-82-2D, Phenylacetic acid, derivs. 113-00-8D, Guanidine, cellulose derivs. 116-31-4, Vitamin A aldehyde 118-92-3, Vitamin L1 119-13-1, 8-Tocopherol 121-79-9, Propyl gallate 127-47-9, Retinyl acetate 128-37-0, Butylated hydroxytoluene, biological studies 130-24-5 130-40-5 137-08-6, Pantothenic acid calcium salt 138-14-7, Deferoxamine mesylate 148-03-8,  $\beta$ -Tocopherol 150-13-0, p-Aminobenzoic acid 153-18-4, Rutin 302-79-4, Vitamin A acid 303-95-7, Coenzyme Q7 303-97-9, Coenzyme Q9 303-98-0, Coenzyme Q10 327-97-9, Chlorogenic acid 404-86-4, Capsaicin 432-70-2,  $\alpha$ -Carotene 444-27-9, Timonacic 462-20-4, Dihydrolipoic acid 472-93-5,  $\gamma$ -Carotene 476-66-4, Ellagic acid 480-19-3, Isorhamnetin 481-46-9, Ginkgetin 490-23-3,  $\epsilon$ -Tocopherol 493-35-6,  $\zeta$ 2-Tocopherol 500-38-9, Nordihydroguaiaretic acid 502-65-8, Lycopene 511-28-4, Vitamin D4 520-18-3, Kaempferol 521-32-4, Bilobetin 523-68-2, N-Acetyl vitamin K5 524-36-7, Pyridoxamine dihydrochloride 528-48-3, Fisetin 529-96-4, Pyridoxamine phosphate 532-40-1, Thiamine phosphoric acid ester chloride 532-43-4, Thiamine mononitrate 534-13-4, N,N'-Dimethylthiourea 540-05-6 541-15-1, L-Carnitine 548-19-6, Isoginkgetin 604-87-5 606-06-4, Coenzyme Q2 616-91-1, N-Acetylcysteine 635-97-2, Thiamine phosphoric acid ester phosphate salt 727-81-1, Coenzyme Q1 752-56-7, Riboflavin tetrabutryate 867-81-2, Pantothenic acid sodium salt 940-69-2D, Lipoamide, derivs. 992-46-1 1065-31-2, Coenzyme Q6 1115-84-0, Vitamin U 1166-52-5, Dodecylgallate 1173-76-8, Coenzyme Q3 1200-22-2,  $\alpha$ -Lipoic acid 1398-61-4D, Chitin, derivs. 1406-18-4, Vitamin E 1721-51-3,  $\zeta$ 1-Tocopherol 1948-33-0, tert-Butylhydroquinone 2124-57-4, Vitamin K2(35) 2319-84-8, Sodium  $\alpha$ -lipoate 2394-68-5, Coenzyme Q8 2487-39-0, Vitamin K-S(II) 2766-51-0, Methylmethioninesulfonium bromide 3040-38-8, Acetyl-L-carnitine 3286-46-2 3475-65-8, Thiamine triphosphoric acid ester 3570-15-8, Nicotinic acid monoethanolamine salt 4370-61-0, Coenzyme Q5 4370-62-1, Coenzyme Q4 5011-34-7, Trimetazidine 5913-70-2 5934-23-6 5934-26-9, Vitamin K7 hydrochloride 6027-13-0, Homocysteine 6035-45-6, Folinic acid calcium salt pentahydrate 7235-40-7,  $\beta$ -Carotene 7440-66-6, Zinc, biological studies 7616-22-0,  $\gamma$ -Tocopherol 7782-49-2, Selenium, biological studies 8059-24-3, Vitamin B6 9002-89-5, Polyvinyl alcohol 9002-89-5D, Polyvinyl alcohol, crosslinked derivs. 9003-53-6, Polystyrene 9003-53-6D, Polystyrene, crosslinked derivs. 9003-70-7, Styrene-divinylbenzene copolymer 9003-70-7D, Styrene-divinylbenzene copolymer, crosslinked derivs. 9004-34-6D, Cellulose, derivs. 9004-64-2, Hydroxypropylcellulose 11032-49-8, Vitamin K2 11104-38-4, Vitamin K1 13345-51-2D, Prostaglandin B1, oligomers 13422-55-4, Methyl vitamin B12 15773-29-2 18642-10-9, Thiamine disulfide hydrochloride 20554-84-1, Parthenolide 23288-49-5, Probutcol 24663-35-2, Coenzyme Q11 24663-36-3, Coenzyme Q12 25013-16-5, Butylated hydroxyanisole



25486-55-9, Vitamin K1 oxide 28841-62-5, D-Myo-Inositol-1,2,6-trisphosphate 58456-91-0 60940-34-3, Ebselen 65666-07-1, Silymarin 69425-13-4, 2,6-Di-tert-butyl-4-[2'-thenoyl]phenol 75060-92-3 77699-47-9, Herbimycin 100827-28-9, Erbstatin. 110101-66-1D, Tirilazad, derivs. 110101-67-2, Tirilazad mesylate 110952-54-0 122726-03-8 125697-92-9, Lavendustin A 132392-39-3 132392-65-5 150977-36-9, Bromelain 700346-94-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(carbonyl trapping agents in combination with medicaments for treatment of neurol. diseases and etiol. related symptomol.)

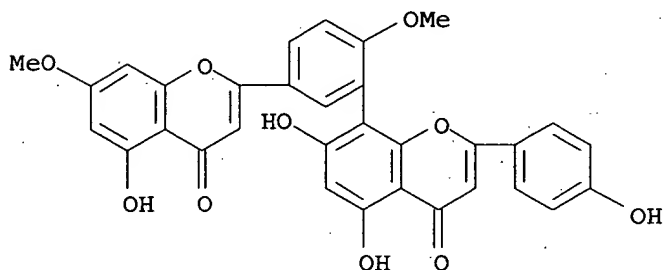
IT 481-46-9, Ginkgetin

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(carbonyl trapping agents in combination with medicaments for treatment of neurol. diseases and etiol. related symptomol.)

RN 481-46-9 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-[5-(5-hydroxy-7-methoxy-4-oxo-4H-1-benzopyran-2-yl)-2-methoxyphenyl]-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:96068 HCAPLUS

DOCUMENT NUMBER: 140:117369

TITLE: Pharmaceutical composition for treatment of cerebral ischemia

INVENTOR(S): Oancea, Florin; Mihaescu, Gheorghe; Mihaescu, Octavian Aurel; Mihaescu, Florin; Mohan, Gheorghe

PATENT ASSIGNEE(S): S.C. Ter. Um. Vet. "Hipocrate" S.R.L., Rom.

SOURCE: Rom., 4 pp.

CODEN: RUXXA3

DOCUMENT TYPE: Patent

LANGUAGE: Romanian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

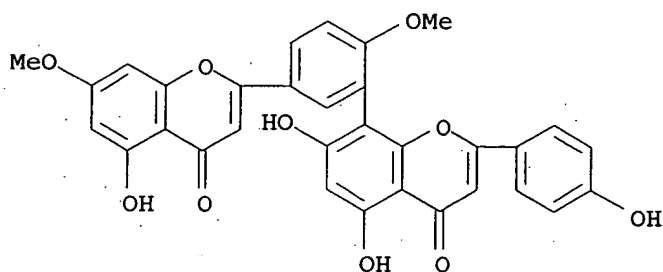
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RO 117419	B1	20020329	RO 1997-1342	19970721
PRIORITY APPLN. INFO.:			RO 1997-1342	19970721

AB A composition for treatment of cerebral ischemia is disclosed which comprises (weight-%) yeast seleniate 10-11 (100 mg Se); Ginkgo biloba leaf extract containing 150-160 mg ginkgo flavone (ginkgetin), 3.5-4; dextrin 35-37;

Me

p-hydroxybenzoate 0.025-0.030; Pr p-hydroxybenzoate 0.012-0.015; magnesium stearate 0.03-0.035; and ascorbic acid 0.1-0.11. A procedure for extraction of ginkgo leaves is disclosed..

IC ICM A61K035-78  
ICS A61K033-04  
CC 63-6 (Pharmaceuticals)  
Section cross-reference(s): 1  
ST ginkgo ginkgo flavone brain ischemia formulation yeast seleniate  
IT Ischemia  
(cerebral; ginkgo flavone-seleniate composition for treatment of cerebral ischemia)  
IT Ginkgo biloba  
Human  
(ginkgo flavone-seleniate composition for treatment of cerebral ischemia)  
IT Brain, disease  
(ischemia; ginkgo flavone-seleniate composition for treatment of cerebral ischemia)  
IT 481-46-9P, Ginkgetin 7782-49-2P, Selenium, biological studies  
RL: BPN (Biosynthetic preparation); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(ginkgo flavone-seleniate composition for treatment of cerebral ischemia)  
IT 481-46-9P, Ginkgetin  
RL: BPN (Biosynthetic preparation); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(ginkgo flavone-seleniate composition for treatment of cerebral ischemia)  
RN 481-46-9 HCAPLUS  
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-[5-(5-hydroxy-7-methoxy-4-oxo-4H-1-benzopyran-2-yl)-2-methoxyphenyl]-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



L18 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2002:754225 HCAPLUS  
DOCUMENT NUMBER: 137:257679  
TITLE: Quercetin derivative and its medicinal use  
INVENTOR(S): Zhao, Yimin; Yang, Ming; Li, Yunfeng; Luan, Xinhui; Luo, Zhipu  
PATENT ASSIGNEE(S): Academy of Military Medical Sciences Institute of Pharmacology and Toxicology, Peop. Rep. China  
SOURCE: PCT Int. Appl., 17 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent  
LANGUAGE: Chinese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002076473	A1	20021003	WO 2002-CN198	20020326
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2004132671	A1	20040708	US 2003-673030	20030926
PRIORITY APPLN. INFO.:			US 2001-278841P	P 20010326
			WO 2002-CN198	A1 20020326
OTHER SOURCE(S):	MARPAT 137:257679			
GI				



AB The patent relates to quercetin derivative (general structure I, R1-4 = H or C1-5 alkyl) its preparation and the medicinal composition containing the same and their application for preventing or treating diseases related to 5HT1A receptor

or neuron damage, including Alzheimer's disease, drug or alc. dependence, sleep disorders or panic state, delaying senility or improving memory function and preventing or treating neuron damage caused by brain injury.

IC ICM A61K031-7048

CC 1-11 (Pharmacology)

IT **Alzheimer's disease**

Cognition enhancers

Drug dependence

Gossypium hirsutum latifolium

(quercetin derivative and medicinal use)

IT **463934-07-8P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation);

THU (Therapeutic use); BIOL (Biological study); PREP

(Preparation); USES (Uses)

(quercetin derivative and medicinal use)

IT **463934-07-8P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation);

THU (Therapeutic use); BIOL (Biological study); PREP

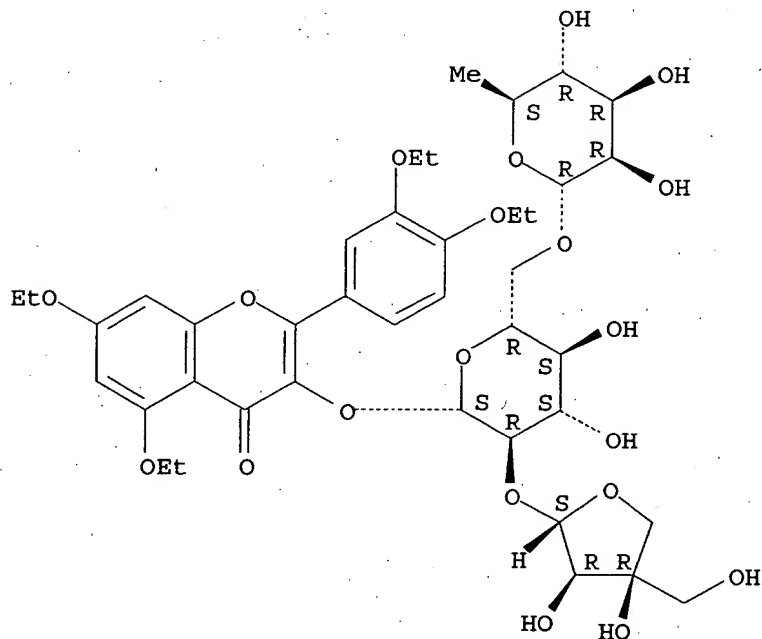
(Preparation); USES (Uses)

(quercetin derivative and medicinal use)

RN 463934-07-8 HCAPLUS

CN 4H-1-Benzopyran-4-one, 3-[(O-D-apio- $\beta$ -D-furanosyl-(1 $\rightarrow$ 2)-O-[6-deoxy- $\alpha$ -L-mannopyranosyl-(1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranosyl)oxy]-2-(3,4-diethoxyphenyl)-5,7-diethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:148735 HCAPLUS

DOCUMENT NUMBER: 136:164277

TITLE: Neurite outgrowth factor in Rutaceae extract

INVENTOR(S): Ito, Hisatomi; Tamura, Shinya; Miyazaki, Toshiji  
 PATENT ASSIGNEE(S): Nagase and Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002060340	A2	20020226	JP 2000-248021	20000817
US 2002040052	A1	20020404	US 2001-927038	20010809
PRIORITY APPLN. INFO.:			JP 2000-248021	A 20000817

OTHER SOURCE(S): MARPAT 136:164277

AB Polyalkoxyflavonoids, especially nobiletin and tangeretin, in the Rutaceae extract  
 are useful for control and relief of neurodegenerative diseases such as cerebral ischemia. Dried peel of Citrus unshiu was extracted with ethanol and nobiletin and tangeretin identified in the extract by known method. Biol. activity of the Citrus unshiu extract on the PC12 cell was shown.

IC ICM A61K031-352.  
 ICS A23L001-30; A61K035-78; A61P009-10; A61P025-00; A61P025-28;  
 A61P043-00; C07D311-30

CC 11-1 (Plant Biochemistry)  
 Section cross-reference(s): 1, 17

ST Rutaceae ext neurite outgrowth factor neurodegenerative disease;  
 polyalkoxyflavonoid neurodegenerative disease control Rutaceae ext

IT Ischemia  
 (cerebral; neurite outgrowth agent)

IT Nervous system, disease  
 (degeneration; neurite outgrowth agent)

IT Brain, disease  
 (ischemia; neurite outgrowth agent)

IT Growth factors, animal  
 RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (neurite extension factors; neurite outgrowth agent)

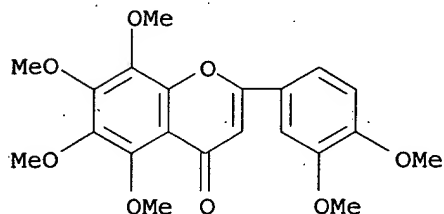
IT Alzheimer's disease  
 Citrus aurantium  
 Citrus depressa  
 Drugs  
 Health food  
 Rutaceae  
 Satsuma  
 (neurite outgrowth agent)

IT Flavonoids  
 RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (polyalkoxyflavonoids; neurite outgrowth agent)

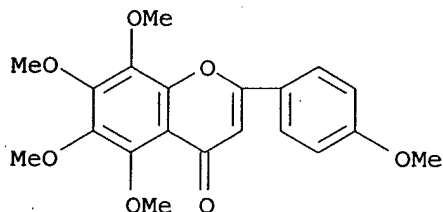
IT 64-17-5, Ethanol, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (neurite outgrowth agent)

IT 478-01-3P, Nobiletin 481-53-8P, Tangeretin  
 RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (neurite outgrowth agent)

IT 478-01-3P, Nobiletin 481-53-8P, Tangeretin  
 RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (neurite outgrowth agent)  
 RN 478-01-3 HCAPLUS  
 CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7,8-tetramethoxy- (9CI)  
 (CA INDEX NAME)



RN 481-53-8 HCAPLUS  
 CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI)  
 (CA INDEX NAME)



L18 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2001:507525 HCAPLUS  
 DOCUMENT NUMBER: 135:102574  
 TITLE: Polyhydroxylated aromatic compounds for the treatment  
 of amyloidosis and  $\alpha$ -synuclein fibril diseases  
 INVENTOR(S): Castillo, Gerardo M.; Choi, Paula Y.; Snow, Alan D.  
 PATENT ASSIGNEE(S): Proteo Tech, Inc., USA  
 SOURCE: PCT Int. Appl., 50 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001049281	A2	20010712	WO 2000-US35715	20001228
WO 2001049281	A3	20020510		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,  
 CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE,  
 GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,  
 LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,  
 MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,  
 TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,  
 MD, RU,

TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2001047032 A1 20011129 US 2000-748748 20001226  
CA 2392709 AA 20010712 CA 2000-2392709 20001228  
EP 1244435 A2 20021002 EP 2000-989636 20001228

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2003532634 T2 20031105 JP 2001-549649 20001228  
US 2004152760 A1 20040805 US 2004-762444 20040121

PRIORITY APPLN. INFO.:

US 1999-173958P P 19991230  
US 2000-748748 A 20001226  
WO 2000-US35715 W 20001228

OTHER SOURCE(S): MARPAT 135:102574

AB Polyhydroxylated aromatic compds., and compns. containing them, are useful for  
the treatment of amyloidosis, especially Alzheimer's disease, and for the  
treatment of diseases characterized by  $\alpha$ -synuclein fibril formation,  
especially Lewy body disease and Parkinson's disease.

IC ICM A61K031-00

CC 1-11 (Pharmacology)

Section cross-reference(s): 63

IT **Alzheimer's disease**

Amyloidosis

Anti-Alzheimer's agents

Antiparkinsonian agents

Down's syndrome

Parkinson's disease

(polyhydroxylated aromatic compds. for the treatment of amyloidosis and  
 $\alpha$ -synuclein fibril diseases)

IT 51-61-6, Dopamine, biological studies 59-92-7, Dopa, biological studies  
72-48-0, Alizarin 77-95-2, Quinic acid 81-61-8, Quinalizarin  
82-12-2, Rufigallol 82-83-7, Puberulonic acid 83-85-2, Fuscine  
87-88-7, Chloranilic acid 90-18-6, Quercetagenin 90-19-7, Rhamnetin  
99-11-6, Citrazinic acid 99-23-0, Puberulic acid 117-12-4, Anthrarufin  
117-39-5, Quercetin 118-76-3, Rhodizonic acid 121-79-9, Propyl gallate  
128-68-7, Phenicin 148-25-4, Chromotropic acid 149-45-1, Tiron  
149-91-7, Gallic acid, biological studies 152-84-1, Ruberythric acid  
153-18-4, Rutin 154-23-4, catechin 301-19-9, Robinin 305-01-1,  
Esculetin 319-89-1, Tetroquinone 437-50-3, Gentisin 446-72-0,  
Gnestein 475-25-2, Hematein 475-54-7, Oosporein 478-43-3, Rhein  
478-60-4, Citromycetin 480-15-9, Datiscetin 480-16-0, Morin  
480-17-1, Leucocyanidin 480-40-0, Chrysin 480-44-4, Acacetin  
481-74-3, Chrysophanic acid 484-89-9, Fumigatin 486-35-1, Daphnetin  
489-32-7, Icarin 490-46-0, Epicatechin 491-45-2, Phloroglucide  
491-50-9, Quercimeritrin 491-58-7, Chrysarobin 491-67-8, Baicalein  
491-70-3, Luteolin 497-75-6, Dioxethedrine 499-14-9, Chondrosine  
501-15-5, Deoxyepinephrine 517-82-8, Echinochrome a 517-88-4, Alkannin  
517-92-0, Chrysamminic acid 518-82-1, Emodin 519-34-6, Maclurin  
520-18-3, Kaempferol 520-27-4, Diosmin 520-34-3, Diosmetin 520-36-5,  
Apigenin 524-30-1, Fraxin 528-21-2, Gallacetophenone 528-48-3,  
Fisetin 528-50-7, Cellobiose 528-53-0, Delphinidin 528-58-5,  
Cyanidin 529-53-3, Scutellarein 531-58-8, Cichoriin 533-73-3,  
1,2,4-Benzenetriol 536-08-3, Digallic acid 548-80-1, chromotrope 2B  
548-83-4, Galangin 550-24-3, Embelin 552-21-6, Methylenedigallic acid  
552-58-9, Eriodictyol 568-02-5, Alizarin blue 568-93-4 569-77-7,  
Purpurogallin 574-84-5, Fraxetin 577-33-3, Anthrarobin 578-74-5,  
Apigetrin 602-64-2, Anthragallol 602-92-6, Dibromogallic acid  
618-73-5, Gallamide 831-61-8, Ethyl gallate 970-73-0, Gallocatechin

970-74-1, Epigallocatechin 1143-38-0, Anthralin 1260-17-9, Carminic acid 1397-77-9, Actinorhodine 1403-56-1, Fomecin a 1404-52-0, Rhodomycin b 1471-96-1, Echinochrome a 1562-85-2, Gallocyanine 1702-77-8, Fusarubin 1927-04-4, 5-Hydroxydopamine 2103-64-2, Gallein 2611-67-8, Cyanidin 3,5-diglucoside 2798-20-1, Gardenin b 3101-51-7, Ergoflavin 4589-33-7, Bostrycoidin 5908-63-4, Baptigenin 7084-24-4, Cyanidin 3-glucoside 7085-55-4, Troxerutin 10140-70-2, Curvularin 13405-60-2,  $\beta$  Glucogallin 15979-35-8, Laccaic acid a 16545-11-2, Guamecycline 16790-41-3, Fomecin b 17249-00-2, Laccaic acid b 18376-31-3, Cyanidin 3-sophoroside 18499-84-8, Laccaic acid d 18499-92-8, Kermesic acid 18719-76-1, Cyanidin 3-rhamnoglucoside 19879-06-2, Granaticin 20004-62-0, Resistomycin 20725-03-5, Fustin 20830-81-3, Daunorubicin 21187-73-5, Gardenin a 21637-25-2, Isoquercitrin 23214-92-8, Doxorubicin 23241-56-7, Laccaic acid c 23444-65-7, Alkannin 23651-95-8, Droxidopa 23666-50-4, Rhodomycin a 27267-69-2, Collinomycin 27613-78-1, Alizarinsulfonic acid 28860-95-9, Carbidopa 29202-00-4, Gardenin d 29550-05-8, Gardenin c 29550-07-0, Gardenin e 35595-03-0, Centaurein 36413-60-2, Quinic acid 38820-68-7, Cyanidin 3-sophoroside 42927-70-8, Apiose 50935-04-1, Carubicin 52479-85-3, Exifone 53318-36-8,  $\alpha$  Glucogallin 67227-56-9, Fenoldopam 71628-96-1, Menogaril 75775-33-6, Purpurin 80455-68-1, Fredericamycin a 97689-87-7, tunichrome B1 349584-11-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polyhydroxylated aromatic compds. for the treatment of amyloidosis and  $\alpha$ -synuclein fibril diseases)

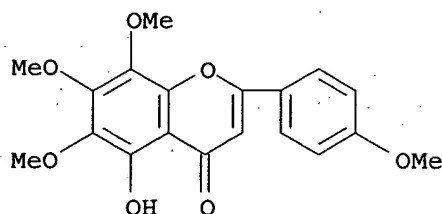
IT 2798-20-1, Gardenin b 21187-73-5, Gardenin a 29202-00-4, Gardenin d 29550-05-8, Gardenin c

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polyhydroxylated aromatic compds. for the treatment of amyloidosis and  $\alpha$ -synuclein fibril diseases)

RN 2798-20-1 HCAPLUS

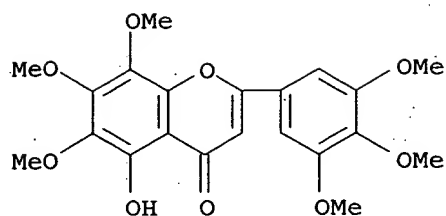
CN 4H-1-Benzopyran-4-one, 5-hydroxy-6,7,8-trimethoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 21187-73-5 HCAPLUS

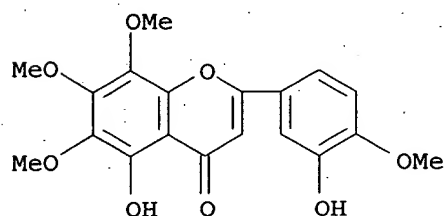
CN 4H-1-Benzopyran-4-one, 5-hydroxy-6,7,8-trimethoxy-2-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)





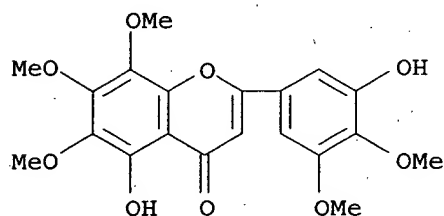
RN 29202-00-4 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5-hydroxy-2-(3-hydroxy-4-methoxyphenyl)-6,7,8-trimethoxy- (9CI) (CA INDEX NAME)



RN 29550-05-8 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5-hydroxy-2-(3-hydroxy-4,5-dimethoxyphenyl)-6,7,8-trimethoxy- (9CI) (CA INDEX NAME)



L18 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:208119 HCAPLUS

DOCUMENT NUMBER: 134:236643

TITLE: Stable carotene-xanthophyll beadlet compositions and methods of use

INVENTOR(S): Lang, John C.

PATENT ASSIGNEE(S): Alcon Universal Ltd., Switz.

SOURCE: PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001019383	A1	20010322	WO 2000-US24439	20000906
W: AU, BR, CA, JP, MX, TR, US				

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE

US 6582721	B1	20030624	US 1999-397472	19990917
CA 2382008	AA	20010322	CA 2000-2382008	20000906
EP 1212071	A1	20020612	EP 2000-959942	20000906

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI, CY

JP 2003516720	T2	20030520	JP 2001-523015	20000906
BR 2000014087	A	20030729	BR 2000-14087	20000906
US 6716447	B1	20040406	US 2002-88188	20020314

PRIORITY APPLN. INFO.:

US 1999-397472	A	19990917
WO 2000-US24439	W	20000906

AB Beadlets comprising xanthophylls and carotenes and/or retinoids, dietary supplements comprising these beadlets and methods of use are disclosed.

IC ICM A61K035-78

ICS A23L001-30; A23L001-303

CC 17-6 (Food and Feed Chemistry)

IT Eye, disease

(retina, ischemia; stable carotene-xanthophyll  
beadlet compns. and methods of use)

IT 57-50-1, Sucrose, biological studies 59-30-3, Folic acid, biological studies 59-67-6, Niacin, biological studies 65-23-6, Pyridoxine 68-19-9, Cyanocobalamin 79-83-4, Pantothenic acid 83-88-5, Vitamin B2, biological studies 110-44-1, Sorbic acid 117-39-5, Quercetin 127-40-2, Lutein 137-66-6, Ascorbyl palmitate 144-68-3, Zeaxanthin 153-18-4, Rutin 472-61-7, Astaxanthin 472-70-8, Cryptoxanthin 472-89-9,  $\alpha$ -Carotene 472-92-4,  $\delta$ -Carotene 472-93-5,  $\gamma$ -Carotene 478-01-3, Nobiletin 480-18-2 480-40-0, Chrysin 480-44-4, Acacetin 481-53-8, Tangeretin 502-65-8,  $\psi, \psi$ -Carotene 514-78-3, Canthaxanthin 520-18-3, Kaempferol 520-36-5, Apigenin 532-32-1, Sodium benzoate 551-15-5, Liquiritin 557-04-0, Magnesium stearate 557-34-6, Zinc acetate 1406-18-4, Vitamin E 3211-76-5, L-Selenomethionine 4345-03-3,  $\alpha$ -Tocopherol succinate 7235-40-7,  $\beta$ -Carotene 7439-96-5, Manganese, biological studies 7440-47-3, Chromium, biological studies 7440-50-8, Copper, biological studies 7440-50-8D, Copper, amino acid chelates, biological studies 7488-99-5,  $\alpha$ -Carotene 7631-86-9, Silica, biological studies 7757-93-9, Dicalcium phosphate 7782-49-2, Selenium, biological studies 9004-65-3, Hydroxypropylmethylcellulose 9005-25-8, Starch, biological studies 9005-65-6, Polysorbate 80 13463-67-7, Titanium dioxide, biological studies 25322-68-3, Polyethylene glycol 74811-65-7, Croscarmellose sodium

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(stable carotene-xanthophyll beadlet compns. and methods of use)

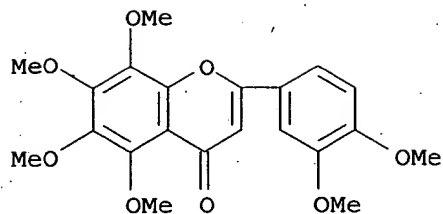
IT 478-01-3, Nobiletin 481-53-8, Tangeretin

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

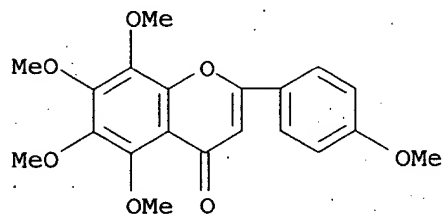
(stable carotene-xanthophyll beadlet compns. and methods of use)

RN 478-01-3 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7,8-tetramethoxy- (9CI)  
(CA INDEX NAME)



RN 481-53-8 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI)  
(CA INDEX NAME)REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:725048 HCAPLUS

DOCUMENT NUMBER: 132:44494

TITLE: Inhibition of xanthine oxidase by flavonoids

AUTHOR(S): Nagao, Akihiko; Seki, Michiko; Kobayashi, Hidetaka

CORPORATE SOURCE: National Food Research Institute, Ministry of  
Agriculture, Forestry and Fisheries, Tsukuba,  
305-8642, JapanSOURCE: Bioscience, Biotechnology, and Biochemistry (1999),  
63(10), 1787-1790

CODEN: BBBIEJ; ISSN: 0916-8451

PUBLISHER: Japan Society for Bioscience, Biotechnology, and  
Agrochemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Various dietary flavonoids were evaluated in vitro for their inhibitory effect on xanthine oxidase, which has been implicated in oxidative injury to tissue by ischemia-reperfusion. Xanthine oxidase activity was determined by directly measuring uric acid formation by HPLC. The structure-activity relationship revealed that the planar flavones and flavonols with a 7-hydroxyl group such as chrysin, luteolin, kaempferol, quercetin, myricetin, and isorhamnetin inhibited xanthine oxidase activity at low concns. (IC<sub>50</sub> values from 0.40 to 5.02  $\mu$ M) in a mixed-type mode, while the nonplanar flavonoids, isoflavones and anthocyanidins were less inhibitory. These results suggest that certain flavonoids might suppress in vivo the formation of active oxygen species and urate by xanthine oxidase.

CC 1-3 (Pharmacology)

IT Antioxidants

Ischemia

Structure-activity relationship

(structure-related inhibition of xanthine oxidase by flavonoids)

IT 60-82-2, Phloretin 90-19-7, Rhamnetin 117-39-5, Quercetin 134-01-0, Peonidin 134-04-3, Pelargonidin 153-18-4, Rutin 154-23-4, + Catechin 446-72-0, Genistein 480-18-2, Taxifolin 480-19-3, Isorhamnetin 480-40-0, Chrysin 481-53-8, Tangeretin 486-66-8, Daidzein 487-26-3, Flavanone 490-46-0, -Epicatechin 491-70-3, Luteolin 520-18-3, KAempferol 520-33-2, Hesperitin 525-82-6, Flavone 528-53-0, Delphinidin 528-58-5, Cyanidin 529-44-2, Myricetin 574-12-9, Isoflavone 577-85-5, Flavonol 863-03-6, -Epicatechin gallate 970-74-1, -Epigallocatechin 989-51-5, (-)-Epigallocatechin gallate 1151-98-0, Apigenidin 1481-83-0, 3-Flavanol 1621-55-2 14051-53-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(structure-related inhibition of xanthine oxidase by flavonoids)

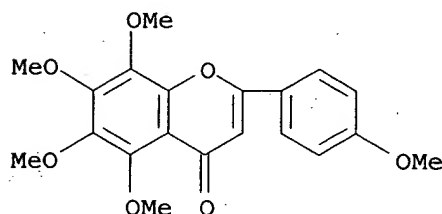
IT 481-53-8, Tangeretin

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(structure-related inhibition of xanthine oxidase by flavonoids)

RN 481-53-8 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:17049 HCAPLUS

DOCUMENT NUMBER: 130:205036

TITLE: Influence of the antioxidant quercetin in vivo on the level of nitric oxide determined by electron paramagnetic resonance in rat brain during global ischemia and reperfusion

AUTHOR(S): Shutenko, Zhanna; Henry, Yann; Pinard, Elisabeth; Seylaz, Jacques; Potier, Pierre; Berthet, Fabienne; Girard, Pierre; Sercombe, Richard

CORPORATE SOURCE: Institut de Chimie des Substances Naturelles, UPR 2301 CNRS, Gif sur Yvette, 91198, Fr.

SOURCE: Biochemical Pharmacology (1999), 57(2), 199-208 CODEN: BCPA6; ISSN: 0006-2952

PUBLISHER: Elsevier Science Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We characterized the changes in nitric oxide (NO) levels in the brain during global forebrain ischemia and reperfusion and tested the ability of the natural flavonoid, quercetin, and a synthetic flavonoid, FB277, to increase the amount of available NO by elimination of the

superoxide radicals produced during reperfusion. In Sprague-Dawley rats, we used a four-vessel occlusion model of forebrain **ischemia** (15 min) and reperfusion (30 min). Brain NO was measured on samples of cerebral cortex and cerebellum ex vivo by ESR (EPR) spectroscopy. The spin trap used was diethyldithiocarbamate sodium salt (DETC) associated with ferrous citrate. The complex Fe(DETC)2NO was detected at 77 K as a triplet signal at  $g = 2.035$ . Groups of animals were treated with quercetin or FB277 (3-morpholinomethyl-3',4',5,7-tetramethoxyflavone) or polyethylene glycol-conjugated superoxide dismutase (PEG-SOD). In control (intact anesthetized animals), the signal was about 3 times greater in the cortex than in the cerebellum. During **ischemia**, the signal rose to 110% in cortex (NS) and 283% in cerebellum ( $P < 0.05$ ). In reperfusion, it fell again to 91% of control in cerebellum (NS) and 35% in cortex ( $P < 0.05$ ). Treatment by quercetin (5 mg/kg i.v.) of intact and **ischemia**-reperfusion groups did not significantly change the signal amplitude in the cerebellum, but did double it in the cortex (to 76% of control) for the **ischemia**-reperfusion group ( $P < 0.05$ ). In contrast, FB277 (3.75 mg/kg i.v.) did not increase the signal in the cortex during **ischemia**-reperfusion, but did do so in the cerebellum (to 152% of control,  $P < 0.05$ ). The results obtained for PEG-SOD (10,000 U/kg i.v.) were similar to those for FB277. In sep. in vitro measurements, we found that quercetin but not FB277 efficiently scavenged superoxide. We hypothesize that quercetin but not FB277 scavenged superoxide anions released in the cortex during reperfusion, thus diminishing the amount of NO removed by the formation of peroxynitrite. The lack of effect of PEG-SOD may be related to the need for chronic treatment to obtain protection.

CC 1-11 (Pharmacology)

ST flavonoid FB277 quercetin antioxidant forebrain **ischemia**; nitric oxide superoxide forebrain **ischemia** flavonoid

IT Polyoxyalkylenes, biological studies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(conjugates with superoxide dismutase, comparison with; effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global **ischemia** and reperfusion)

IT Anti-ischemic agents

Radical scavengers

(effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global **ischemia** and reperfusion)

IT **Brain, disease**

(forebrain, **ischemia**; effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global **ischemia** and reperfusion)

IT Reperfusion

(injury; effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global **ischemia** and reperfusion)

IT Antioxidants

(pharmaceutical; effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global **ischemia** and reperfusion)

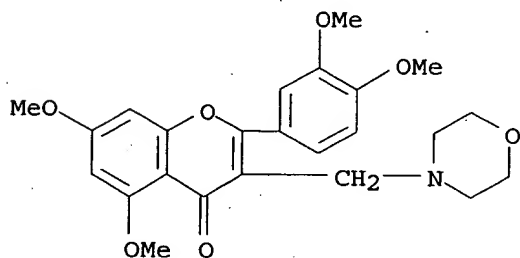
IT 9054-89-1D, Superoxide dismutase, conjugates with polyethylene glycol

25322-68-3D, Polyethylene glycol, conjugates with superoxide dismutase

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(comparison with; effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global **ischemia**)

- and reperfusion)
- IT 220962-60-7, FB 277  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global ischemia and reperfusion)
- IT 117-39-5, Quercetin  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global ischemia and reperfusion)
- IT 10102-43-9, Nitric oxide, biological studies  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global ischemia and reperfusion)
- IT 11062-77-4, Superoxide  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (elimination of; effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global ischemia and reperfusion)
- IT 220962-60-7, FB 277  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (effects of antioxidant flavonoids quercetin and FB 277 on NO and superoxide in rat brain during global ischemia and reperfusion)
- RN 220962-60-7 HCAPLUS
- CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,7-dimethoxy-3-(4-morpholinylmethyl)- (9CI) (CA INDEX NAME)



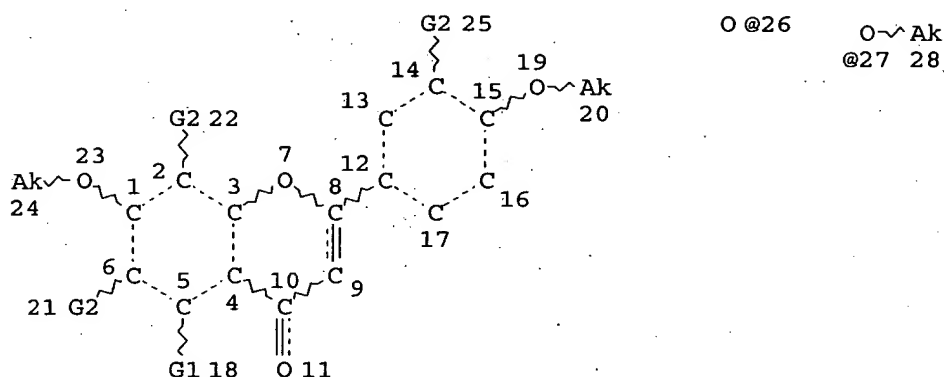
REFERENCE COUNT:

15

THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L1 STR



VAR G1=26/27

VAR G2=H/27

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CONNECT IS E1 RC AT 24

CONNECT IS E1 RC AT 26

CONNECT IS E1 RC AT 28

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 28

## STEREO ATTRIBUTES: NONE

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L9 450 SEA FILE=HCAPLUS ABB=ON PLU=ON L3 (L) (BAC OR DMA OR PAC OR PKT OR THU) /RL

L12 46728 SEA FILE=HCAPLUS ABB=ON PLU=ON ISCHEMIA+PFT,NT/CT

L13 15201 SEA FILE=HCAPLUS ABB=ON PLU=ON BRAIN, DISEASE+PFT/CT (L) (ISCHEMIA OR NEURITE)

L14 71336 SEA FILE=HCAPLUS ABB=ON PLU=ON ISCHEMIA OR NEURITE

L15 18051 SEA FILE=HCAPLUS ABB=ON PLU=ON "ALZHEIMER'S DISEASE"+PFT,NT/CT

L16 380 SEA FILE=HCAPLUS ABB=ON PLU=ON NEUROCYT?

L17 88163 SEA FILE=HCAPLUS ABB=ON PLU=ON L12 OR L13 OR L14 OR L15 OR L16

L18 8 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND L17

L19 972 SEA L3

L20 76 SEA L19 AND (ALZHEIM? OR NEUROCYT? OR NEURITE? OR ISCHEM? OR BRAIN OR NEUR? OR NERVOUS SYSTEM)

L21 76 DUP REM L18 L20 (8 DUPLICATES REMOVED)

=&gt; d 121 bib ab 9-76

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, MEDLINE, EMBASE, BIOSIS, USPATEFULL' -

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L21 ANSWER 9 OF 76 MEDLINE on STN

DUPLICATE 5

AN 2001688957 MEDLINE  
DN PubMed ID: 11726811  
TI Tissue distribution and **neuroprotective** effects of citrus flavonoid tangeretin in a rat model of Parkinson's disease.  
AU Datla K P; Christidou M; Widmer W W; Rooprai H K; Dexter D T  
CS Department of Neuroinflammation, Faculty of Medicine, Imperial College of Science, Technology and Medicine, Charing Cross Campus, Fulham Palace Road, London, UK.  
SO Neuroreport, (2001 Dec 4) 12 (17) 3871-5.  
Journal code: 9100935. ISSN: 0959-4965.  
CY England: United Kingdom  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200201  
ED Entered STN: 20011210  
Last Updated on STN: 20020125  
Entered Medline: 20020111  
AB **Neuroprotective** effects of a natural antioxidant tangeretin, a citrus flavonoid, were elucidated in the 6-hydroxydopamine (6-OHDA) lesion rat model of Parkinson's disease (PD), after bioavailability studies. Following the chronic oral administration (10 mg/kg/day for 28 days), significant levels of tangeretin were detected in the hypothalamus, striatum and hippocampus (3.88, 2.36 and 2.00 ng/mg, respectively). The levels in the liver and plasma were 0.59 ng/mg and 0.11 ng/ml respectively. Unilateral infusion of the dopaminergic **neurotoxin**, 6-hydroxydopamine (6-OHDA; 8 microg), onto medial forebrain bundle significantly reduced the number of tyrosine hydroxylase positive (TH+) cells in the substantia nigra and decreased striatal dopamine content in the vehicle treated rats. Sub-chronic treatment of the rats with high doses of tangeretin (20 mg/kg/day for 4 days; p.o.) before 6-OHDA lesioning markedly reduced the loss of both TH+ cells and striatal dopamine content. These studies, for the first time, give evidence that tangeretin crosses the blood-brain barrier. The significant protection of striato-nigral integrity and functionality by tangeretin suggests its potential use as a **neuroprotective** agent.

L21 ANSWER 10 OF 76 MEDLINE on STN DUPLICATE 6  
AN 2001324909 MEDLINE  
DN PubMed ID: 11299000  
TI Evaluation of the effects of swainsonine, captopril, tangeretin and nobiletin on the biological behaviour of **brain** tumour cells in vitro.  
AU Rooprai H K; Kandaneeratchi A; Maidment S L; Christidou M; Trillo-Pazos G; Dexter D T; Rucklidge G J; Widmer W; Pilkington G J  
CS Department of Neuropathology, Institute of Psychiatry, King's College London, UK.. spkahkr@iop.kcl.ac.uk  
SO Neuropathology and applied neurobiology, (2001 Feb) 27 (1) 29-39.  
Journal code: 7609829. ISSN: 0305-1846.  
CY England: United Kingdom  
DT (EVALUATION STUDIES)  
Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200106  
ED Entered STN: 20010611  
Last Updated on STN: 20010611  
Entered Medline: 20010607  
AB Although intrinsic tumours of the **brain** seldom metastasize to



distant sites, their diffuse, infiltrative-invasive growth within the **brain** generally precludes successful surgical and adjuvant therapy. Hence, attention has now focused on novel therapeutic approaches to combat **brain** tumours that include the use of anti-invasive and anti-proliferative agents. The effect of four anti-invasive agents, swainsonine (a locoweed alkaloid), captopril (an anti-hypertensive drug), tangeretin and nobiletin (both citrus flavonoids), were investigated on various parameters of **brain** tumour invasion such as matrix metalloproteinase (MMP) secretion, migration, invasion and adhesion. A standard cytotoxicity assay was used to optimize working concentrations of the drugs on seven human **brain** tumour-derived cell lines of various histological type and grade of malignancy. A qualitative assessment by gelatin zymography revealed that the effect of these agents varied between the seven cell lines such that the low grade pilocytic astrocytoma was unaffected by three of the agents. In contrast, downregulation of the two gelatinases, MMP-2 and MMP-9 was seen in the grade 3 astrocytoma irrespective of which agent was used. Generally, swainsonine was the least effective whereas the citrus flavonoids, particularly nobiletin, showed the greatest downregulation of secretion of the MMPs. Furthermore, captopril and nobiletin were most efficient at inhibiting invasion, migration and adhesion in four representative cell lines (an ependymoma, a grade II oligoastrocytoma, an anaplastic astrocytoma and a glioblastoma multiforme). Yet again, the effects of the four agents varied between the four cell lines. Nobiletin was, nevertheless, the most effective agent used in these assays. In conclusion, the differential effects seen on the various parameters studied by these putative anti-invasive agents may be the result of interference with MMPs and other mechanisms underlying the invasive phenotype. From these pilot studies, it is possible that these agents, especially the citrus flavonoids, could be of future therapeutic value. However, further work is needed to validate this in a larger study.

L21 ANSWER 11 OF 76 MEDLINE on STN DUPLICATE 7  
 AN 1999344288 MEDLINE  
 DN PubMed ID: 10415799  
 TI Influence of putative antiinvasive agents on matrix metalloproteinase secretion by human neoplastic glia in vitro.  
 AU Rooprai H K; Kandaneeratachi A; Rucklidge G; Pilkington G J  
 CS Department of Neuropathology, Institute of Psychiatry, London, UK..  
 spkahkr@iop.kcl.ac.uk  
 SO Annals of the New York Academy of Sciences, (1999 Jun 30) 878 654-7.  
 Journal code: 7506858. ISSN: 0077-8923.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199908  
 ED Entered STN: 19990820  
 Last Updated on STN: 20000303  
 Entered Medline: 19990811

L21 ANSWER 12 OF 76 MEDLINE on STN  
 AN 92085771 MEDLINE  
 DN PubMed ID: 1660953  
 TI Effect of two flavonoid compounds on central **nervous system**. Analgesic activity.  
 AU Picq M; Cheav S L; Prigent A F  
 CS Laboratoire de Chimie Biologique, Institut National des Sciences Appliquees de Lyon, Unite INSERM 205, Villeurbanne, France.

SO Life sciences, (1991) 49 (26) 1979-88.  
Journal code: 0375521. ISSN: 0024-3205.  
CY ENGLAND: United Kingdom  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 199201  
ED Entered STN: 19920209  
Last Updated on STN: 19920209  
Entered Medline: 19920123  
AB The psychopharmacological profile of quercetin (Q) and penta-O-ethylquercetin (PQ) showed for both compounds a sedative effect on central nervous system in mice. In this set of pharmacological tests (hypothermia, spontaneous motility, psychomotor activity) penta-O-ethylquercetin always exerted a more pronounced effect than quercetin, probably due to the difference of lipophilicity. In analgesia experiments such as acetic acid-induced writhings, penta-O-ethylquercetin showed a significant dose-related effect whereas quercetin was inactive. As pretreatment with naloxone failed to antagonize the analgesic activity of penta-O-ethylquercetin, it was suggested that penta-O-ethylquercetin acted mainly peripherally.

L21 ANSWER 13 OF 76 MEDLINE on STN

AN 89280996 MEDLINE

DN PubMed ID: 2733540

TI Flavonoid modulation of protein kinase C activation.

AU Picq M; Dubois M; Munari-Silem Y; Prigent A F; Pacheco H

CS Laboratoire de Chimie Biologique, Institut National des Sciences Appliquees de Lyon, Unite INSERM 205, Villeurbanne, France.

SO Life sciences, (1989) 44 (21) 1563-71.  
Journal code: 0375521. ISSN: 0024-3205.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 198907

ED Entered STN: 19900309

Last Updated on STN: 19900309

Entered Medline: 19890720

AB The flavonoid quercetin exhibited a biphasic effect on calcium and phospholipid-dependent protein kinase (protein kinase C) activity from rat brain and pig thyroid. At a low concentration ( $10^{-7}$  M) quercetin stimulated the enzyme activity whereas at higher concentrations quercetin was inhibitory. By contrast the synthetic penta-O-ethylquercetin stimulated protein kinase C activity in a dose-dependent manner. When freshly dispersed pig thyroid cells were treated with penta-O-ethylquercetin or 12-O-tetradecanoylphorbol 13-acetate (TPA), a 50% decrease of the cytosolic protein kinase C activity was observed. These results suggest that the lipophilicity as well as other structural determinants may be crucial for the ability of flavonoids to regulate (inhibit or activate) the enzyme activity.

L21 ANSWER 14 OF 76 MEDLINE on STN

AN 89017343 MEDLINE

DN PubMed ID: 3174690

TI Characterization of penta-O-ethylquercetin binding sites in rat brain membranes.

AU Dubois M; Picq M; Prigent A F; Nemoz G; Pacheco H

CS Department of Biological Chemistry, INSERM unit 205, Villeurbanne, France.

SO Progress in clinical and biological research, (1988) 280 151-5.  
Journal code: 7605701. ISSN: 0361-7742.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 198811  
ED Entered STN: 19900308  
Last Updated on STN: 19970203  
Entered Medline: 19881123

L21 ANSWER 15 OF 76 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN DUPLICATE 3

AN 2003229368 EMBASE  
TI Flavonoids - Novel lead compounds for the development of P2Y(2) receptor  
antagonists.  
AU Kaulich M.; Streicher F.; Mayer R.; Muller I.; Muller C.E.  
CS Dr. C.E. Muller, Pharmazeutisches Institut, Pharmazeutische Chemie  
Poppelsdorf, Kreuzbergweg 26, D-53115 Bonn, Germany. christa.mueller@uni-  
bonn.de  
SO Drug Development Research, (1 May 2003) Vol. 59, No. 1, pp. 72-81.  
Refs: 36  
ISSN: 0272-4391 CODEN: DDREDK  
CY United States  
DT Journal; Conference Article  
FS 030 Pharmacology  
037 Drug Literature Index  
LA English  
SL English  
ED Entered STN: 20030626  
Last Updated on STN: 20030626

AB A series of 40 flavonoids were investigated as antagonists at P2Y(2)  
receptors expressed in NG108-15 cells (mouse neuroblastoma x rat  
glioma hybrid cell line) in a functional assay measuring the inhibition of  
UTP-stimulated intracellular calcium release. Several flavonoids were  
identified as potent antagonists at P2Y(2) receptors with IC(50) values in  
the low micromolar concentration range; they were similarly potent or more  
potent than the standard P2Y(2) antagonists Reactive Blue 2 and suramin.  
Flavone derivatives proved to be more potent than flavanones. The flavone  
derivatives catechin and epicatechin were inactive. However, a bicyclic  
benzopyranone ring system was found to be not an absolute prerequisite for  
P2Y(2) antagonism, since the chalcone derivative  $\beta$ -oxo-aurentiacin  
(14) was also relatively potent (IC(50) 19  $\mu$ M). Investigated flavone  
glycosides were completely inactive. The most potent P2Y(2) receptor  
antagonists of the present series were kaempferol (19), heptamethoxyflavon  
(29), and tangeretin (25), with IC(50) values between 6-19  $\mu$ M.  
Increased lipophilicity by introducing (additional) methyl groups did not  
generally increase antagonistic potency. Structure-activity relationships  
proved to be complex. Concentration-response curves for the P2Y(2)  
agonist UTP were not shifted to the right in the presence of increasing  
concentrations of tangeretin (25), and EC(50) values for UTP were not  
affected by the antagonist, but the amplitude of the response was reduced,  
indicating allosteric antagonism. In conclusion, we have identified  
flavonoids as novel lead structures for the development of noncompetitive  
antagonists at P2Y(2) receptors, which may be of interest as potential  
antiinflammatory drugs. .COPYRG. 2003 Wiley-Liss, Inc.

L21 ANSWER 16 OF 76 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

AN 2004465119 EMBASE  
TI Flavonoids and the brain: Interactions at the blood-brain barrier and their physiological effects on the central nervous system.  
AU Youdim K.A.; Shukitt-Hale B.; Joseph J.A.  
CS james.joseph@tuffs.edu  
SO Free Radical Biology and Medicine, (1 Dec 2004) Vol. 37, No. 11, pp. 1683-1693.  
Refs: 107  
ISSN: 0891-5849 CODEN: FRBMEH  
PUI S 0891-5849(04)00635-5  
CY United States  
DT Journal; General Review  
FS 002 Physiology  
008 Neurology and Neurosurgery  
029 Clinical Biochemistry  
LA English  
SL English  
ED Entered STN: 20041202  
Last Updated on STN: 20041202  
AB Over the past few years there has been an exponential growth in the number of reports describing the effects of nutritional modulation on aging and age-related diseases. Specific attention has been directed toward the beneficial effects afforded by dietary antioxidants, in particular those from fruit and vegetables, in ameliorating age-related deficits in brain performance. The rationale for studying the effects of dietary intervention stems from evidence implicating free radicals in aspects related to the aging process. Age-dependent neuropathology is a cumulative response to alterations induced by reactive oxygen species. Therefore cognitive aging, according to this hypothesis, should be slowed, and possibly even reversed, by appropriately increasing levels of antioxidants or decreasing overproduction of free radicals in the body.

L21 ANSWER 17 OF 76 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

AN 2003366978 EMBASE  
TI The potential for strategies using micronutrients and heterocyclic drugs to treat invasive gliomas.  
AU Rooprai H.K.; Christidou M.; Pilkington G.J.  
CS Dr. H.K. Rooprai, Department of Neuropathology, Institute of Psychiatry, King's College London, De Crespigny Park, London SE5 8AF, United Kingdom. h.rooprai@iop.kcl.ac.uk  
SO Acta Neurochirurgica, (1 Aug 2003) Vol. 145, No. 8, pp. 683-690.  
Refs: 57  
ISSN: 0001-6268 CODEN: ACNUA5  
CY Austria  
DT Journal; General Review  
FS 008 Neurology and Neurosurgery  
016 Cancer  
037 Drug Literature Index  
LA English  
SL English  
ED Entered STN: 20030925  
Last Updated on STN: 20030925  
AB Local invasion of neoplastic cells into the surrounding brain is perhaps the most important aspect of the biology of gliomas that precludes successful therapy. Despite significant advances in neuro-imaging, neurosurgery and radiotherapy, the median survival for

patients with a malignant glioma is still less than one year. With the increasing knowledge of the biology of brain tumours, derived from cellular and molecular studies, new methods of treatment are being developed with some success. Approaches studied already include anti-invasive, pro-apoptotic and anti-angiogenesis strategies and clinical trials are imminent. In this article we review two new approaches to the management of gliomas: nutraceutical intervention and heterocyclic drugs. The first approach uses a combination of naturally occurring agents, including citrus flavonoids, chokeberry extract, red grape seed extract, lycopene, selenium and red clover extract. These agents can either trigger apoptosis or affect the pathways underlying diffuse invasion. The second approach involves the use of a heterocyclic drug, clomipramine, which selectively triggers apoptosis in neoplastic cells but not in normal glia. The article refers to the results of recent studies performed in our laboratory which suggest that these new approaches can be translated into benefit to patients.

L21 ANSWER 18 OF 76 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

AN 2003314927 EMBASE

TI Salvia for dementia therapy: Review of pharmacological activity and pilot tolerability clinical trial.

AU Perry N.S.L.; Bollen C.; Perry E.K.; Ballard C.

CS E.K. Perry, Medicinal Plant Research Centre, Ctr. Devmt. in Clin. Brain Ageing, Newcastle General Hospital, Westgate Road, Newcastle Upon Tyne NE4 6BE, New Zealand. e.k.perry@ncl.ac.uk

SO Pharmacology Biochemistry and Behavior, (2003) Vol. 75, No. 3, pp. 651-659.

Refs: 58

ISSN: 0091-3057 CODEN: PBBHAU

CY United States

DT Journal; General Review

FS 008 Neurology and Neurosurgery

030 Pharmacology

037 Drug Literature Index

038 Adverse Reactions Titles

LA English

SL English

ED Entered STN: 20030821

Last Updated on STN: 20030821

AB S. lavandulaefolia Vahl. (Spanish sage) extracts and constituents have demonstrated anticholinesterase, antioxidant, anti-inflammatory, oestrogenic and CNS depressant (sedative) effects all of which are currently relevant to the treatment of Alzheimer's disease (AD). The essential oil inhibits the enzyme acetylcholinesterase (AChE) from human brain tissue and bovine erythrocyte and individual monoterpenoid constituents inhibit AChE with varying degrees of potency. In vivo AChE inhibition of select brain (striatal and hippocampal over cortical) AChE was obtained following oral administration of the essential oil to rats. In a study in healthy volunteers essential oil administration produced significant effects on cognition. In a pilot open-label study involving oral administration of the essential oil to patients with AD, a significant increase in diastolic and systolic blood pressure was observed in two patients, however this may have been due primarily to preexisting hypertension and there were no abnormalities in other vital signs or blood samples during the trial period. Although an open label trial is not free from practice effects or rater-caregiver expectations, statistically significant differences between baseline and 6 weeks treatment were a reduction in neuropsychiatric symptoms

and an improvement in attention. .COPYRGT. 2003 Published by Elsevier Inc.

L21 ANSWER 19 OF 76 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

AN 2003315664 EMBASE

TI Clinical review: Severe malaria.

AU Trampuz A.; Jereb M.; Muzlovic I.; Prabhu R.M.

CS A. Trampuz, Division of Infectious Diseases, Department of Internal  
Medicine, Mayo Clinic, Rochester, MN, United States. andrejtrampuz@aol.com

SO Critical Care, (2003) Vol. 7, No. 4, pp. 315-323.

Refs: 52

ISSN: 1364-8535 CODEN: CRCAFM

CY United Kingdom

DT Journal; General Review

FS 004 Microbiology

005 General Pathology and Pathological Anatomy

017 Public Health, Social Medicine and Epidemiology

030 Pharmacology

037 Drug Literature Index

038 Adverse Reactions Titles

LA English

SL English

ED Entered STN: 20030821

Last Updated on STN: 20030821

AB Malaria represents a medical emergency because it may rapidly progress to complications and death without prompt and appropriate treatment. Severe malaria is almost exclusively caused by *Plasmodium falciparum*. The incidence of imported malaria is increasing and the case fatality rate remains high despite progress in intensive care and antimalarial treatment. Clinical deterioration usually appears 3-7 days after onset of fever. Complications involve the nervous, respiratory, renal, and/or hematopoietic systems. Metabolic acidosis and hypoglycemia are common systemic complications. Intravenous quinine and quinidine are the most widely used drugs in the initial treatment of severe *falciparum* malaria, whereas artemisinin derivatives are currently recommended for quinine-resistant cases. As soon as the patient is clinically stable and able to swallow, oral treatment should be given. The intravascular volume should be maintained at the lowest level sufficient for adequate systemic perfusion to prevent development of acute respiratory distress syndrome. Renal replacement therapy should be initiated early. Exchange blood transfusion has been suggested for the treatment of patients with severe malaria and high parasitemia. For early diagnosis, it is paramount to consider malaria in every febrile patient with a history of travel in an area endemic for malaria.

L21 ANSWER 20 OF 76 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

AN 2002368171 EMBASE

TI Antioxidants as treatment for neurodegenerative disorders.

AU Moosmann B.; Behl C.

CS Dr. C. Behl, Department of Pathobiochemistry, Johannes Gutenberg  
University, 55099 Mainz, Germany. cbehl@uni-mainz.de

SO Expert Opinion on Investigational Drugs, (1 Oct 2002) Vol. 11, No. 10, pp.  
1407-1435.

Refs: 373

ISSN: 1354-3784 CODEN: EOIDER

CY United Kingdom

DT Journal; General Review

FS 008 Neurology and Neurosurgery

030 Pharmacology  
037 Drug Literature Index  
038 Adverse Reactions Titles

LA English

SL English

ED Entered STN: 20021107

Last Updated on STN: 20021107

AB Oxidative stress is a ubiquitously observed hallmark of **neurodegenerative** disorders. **Neuronal** cell dysfunction and cell death due to oxidative stress may causally contribute to the pathogenesis of progressive **neurodegenerative** disorders, such as **Alzheimer's** disease and Parkinson's disease, as well as acute syndromes of **neurodegeneration**, such as ischaemic and haemorrhagic stroke. **Neuroprotective** antioxidants are considered a promising approach to slowing the progression and limiting the extent of **neuronal** cell loss in these disorders. The clinical evidence demonstrating that antioxidant compounds can act as protective drugs in **neurodegenerative** disease, however, is still relatively scarce. In the following review, the available data from clinical, animal and cell biological studies regarding the role of antioxidant **neuroprotection** in progressive **neurodegenerative** disease will be summarised, focussing particularly on **Alzheimer's** disease, Parkinson's disease, Huntington's disease and amyotrophic lateral sclerosis. The general complications in developing potent **neuroprotective** antioxidant drugs directed against these long-term degenerative conditions will also be discussed. The major challenges for drug development are the slow kinetics of disease progression, the unsolved mechanistic questions concerning the final causalities of cell death, the necessity to attain an effective permeation of the blood-brain barrier and the need to reduce the high concentrations currently required to evoke protective effects in cellular and animal model systems. Finally, an outlook as to which direction antioxidant drug development and clinical practice may be leading to in the near future will be provided.

L21 ANSWER 21 OF 76 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

AN 2002180550 EMBASE

TI Flavonoids in cell function.

AU Manthey J.A.; Buslig B.S.; Baker M.E.

CS J.A. Manthey, U.S. Department of Agriculture, Citrus and Subtropical Products Lab., 600 Avenue S, NW, Winter Haven, FL 33881, United States

SO Advances in Experimental Medicine and Biology, (2002) Vol. 505, pp. 1-7.  
Refs: 25

ISSN: 0065-2598 CODEN: AEMBAP

CY United States

DT Journal; Conference Article

FS 029 Clinical Biochemistry

030 Pharmacology

037 Drug Literature Index

LA English

ED Entered STN: 20020606

Last Updated on STN: 20020606

L21 ANSWER 22 OF 76 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

AN 2001372876 EMBASE

TI In-vitro activity of *S. lavandulaefolia* (Spanish sage) relevant to treatment of **Alzheimer's** disease.

AU Perry N.S.L.; Houghton P.J.; Sampson J.; Theobald A.E.; Hart S.;  
Lis-Balchin M.; Hoult J.R.S.; Evans P.; Jenner P.; Milligan S.; Perry E.K.  
CS P.J. Houghton, Pharmacognosy Research Laboratories, Department of  
Pharmacy, King's College London, 150 Stamford Street, London SE1 9NN,  
United Kingdom. peter.houghton@kcl.ac.uk

SO Journal of Pharmacy and Pharmacology, (2001) Vol. 53, No. 10, pp.  
1347-1356.

Refs: 47

ISSN: 0022-3573 CODEN: JPPMAB

CY United Kingdom

DT Journal; Article

FS 008 Neurology and Neurosurgery

037 Drug Literature Index

030 Pharmacology

029 Clinical Biochemistry

003 Endocrinology

LA English

SL English

ED Entered STN: 20011108

Last Updated on STN: 20011108

AB *Salvia lavandulaefolia* Vahl. (Spanish sage) essential oil and individual  
monoterpenoid constituents have been shown to inhibit the enzyme  
acetylcholinesterase in-vitro and in-vivo. This activity is relevant to  
the treatment of **Alzheimer's** disease, since anticholinesterase  
drugs are currently the only drugs available to treat **Alzheimer**  
's disease. Other activities relevant to **Alzheimer's** disease  
include antioxidant, anti-inflammatory and estrogenic effects. Results of  
in-vitro tests for these activities are reported here for *S.*  
*lavandulaefolia* extracts, the essential oil and its major constituents.  
Antioxidant activity (inhibition of bovine brain liposome  
peroxidation) was found in the EtOH extract of the dried herb (5 mg  
mL(-1)) and the monoterpenoids (0.1 M)  $\alpha$ - and  $\beta$ -pinene and  
1,8-cineole. Thujone and geraniol had lower antioxidant effects, while  
camphor had no antioxidant effects. Possible anti-inflammatory activity  
(eicosanoid inhibition in rat leucocytes) was found in the EtOH extract  
(50  $\mu$ g mL(-1)) and was shown by the monoterpenoids  $\alpha$ -pinene and  
geraniol (0.2 mM), but not 1,8-cineole, thujone or camphor. Possible  
estrogenic activity (via induction of  $\beta$ -galactosidase activity in  
yeast cells) was found in the essential oil (0.01 mg mL(-1)) and the  
monoterpenoid geraniol (0.1-2 mM). 1,8-Cineole,  $\alpha$ - and  $\beta$ -pinene  
and thujone did not exhibit estrogenic activity in this analysis. These  
results demonstrate that *S. lavandulaefolia*, its essential oil and some  
chemical constituents have properties relevant to the treatment of  
**Alzheimer's** disease and provide further data supporting the value  
of carrying out clinical studies in patients with **Alzheimer's**  
disease using this plant species.

L21 ANSWER 23 OF 76 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN

AN 2000370892 EMBASE

TI Pharmacological activities of *Vitex agnus-castus* extracts in vitro.

AU Meier B.; Berger D.; Hoberg E.; Sticher O.; Schaffner W.

CS B. Meier, Herbal Medicinal Products, CH-8590 Romanshorn 1, Switzerland.  
beat.meier@zellerag.ch

SO Phytomedicine, (2000) Vol. 7, No. 5, pp. 373-381.

Refs: 31

ISSN: 0944-7113 CODEN: PYTOEY

CY Germany

DT Journal; Article



FS 030 Pharmacology  
037 Drug Literature Index  
LA English  
SL English  
ED Entered STN: 20001213  
Last Updated on STN: 20001213  
AB The pharmacological effects of ethanolic Vitex agnus-castus fruit-extracts (especially Ze 440) and various extract fractions of different polarities were evaluated both by radioligand binding studies and by superfusion experiments. A relative potent binding inhibition was observed for dopamine D2 and opioid ( $\mu$  and  $\kappa$  subtype) receptors with IC50 values of the native extract between 20 and 70 mg/mL. Binding, neither to the histamine H1, benzodiazepine and OFQ receptor, nor to the binding-site of the serotonin (5-HT) transporter, was significantly inhibited. The lipophilic fractions contained the diterpenes rotundifuran and 6 $\beta$ ,7 $\beta$ -diacetoxy-13-hydroxy-labda-8,14-dien. They exhibited inhibitory actions on dopamine D2 receptor binding. While binding inhibition to  $\mu$  and  $\kappa$  opioid receptors was most pronounced in lipophilic fractions, binding to  $\delta$  opioid receptors was inhibited mainly by a aqueous fraction. Standardised Ze 440 extracts of different batches were of constant pharmacological quality according to their potential to inhibit the binding to D2 receptors. In superfusion experiments, the aqueous fraction of a methanolic extract inhibited the release of acetylcholine in a concentration-dependent manner. In addition, the potent D2 receptor antagonist spiperone antagonised the effect of the extract suggesting a dopaminergic action mediated by D2 receptor activation. Our results indicate a dopaminergic effect of Vitex agnus-castus extracts and suggest additional pharmacological actions via opioid receptors.

L21 ANSWER 24 OF 76 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN  
AN 89120119 EMBASE  
DN 1989120119  
TI Protein kinase C inhibition by plant flavonoids. Kinetic mechanisms and structure-activity relationships.  
AU Ferriola P.C.; Cody V.; Middleton Jr. E.  
CS Department of Medicine, State University of New York, Buffalo General Hospital, Buffalo, NY 14203, United States  
SO Biochemical Pharmacology, (1989) Vol. 38, No. 10, pp. 1617-1624.  
ISSN: 0006-2952 CODEN: BCPA6  
CY United Kingdom  
DT Journal  
FS 029 Clinical Biochemistry  
030 Pharmacology  
037 Drug Literature Index  
LA English  
SL English  
ED Entered STN: 911212  
Last Updated on STN: 911212  
AB Protein kinase C (PKC) from rat brain was inhibited by plant flavonoids in a concentration-dependent manner depending on flavonoid structure. Of the fifteen flavonoids studied, fisetin, quercetin and luteolin were the most potent, while hesperetin, taxifolin and rutin were among the least potent. The flavonol fisetin was almost 100% inhibitory at a concentration of 100  $\mu$ M. The extent of inhibition was the same whether diacylglycerol or 12-O-tetradecanoylphorbol-13-acetate was used as enzyme activator. Inhibition was independent of Ca<sup>2+</sup>, phospholipid, and enzyme activator, as shown by inhibition of protamine phosphorylation in

the absence of the regulatory components. Fisetin was a competitive inhibitor with respect to ATP binding and noncompetitive with respect to protein substrate. The X-ray crystal structure analysis of hesperetin monohydrate showed that the molecule is essentially planar despite the sofa conformation of the  $\gamma$ -pyran ring and the 27° twist of the 2-phenyl ring. Comparison of this inactive flavanone with those of the active flavones showed that, although hesperetin can adopt a planar profile similar to those of fisetin and quercetin, the 4''-methoxy substituent blocks an essential structural feature required for inhibitory activity. Analysis of these structure-activity data revealed a model of the minimal essential features required for PKC inhibition by flavonoids: a coplanar flavone structure with free hydroxyl substituents at the 3', 4' and 7-positions.

- L21 ANSWER 25 OF 76 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.  
on STN  
AN 77173345 EMBASE  
DN 1977173345  
TI Regulatory action of phenylbenzo  $\gamma$  pyrone (PBP) derivatives on blood constituents affecting rheology in patients with coronary heart disease (CHD).  
AU Robbins R.C.  
CS Univ. Florida, Gainesville, Fla. 32611, United States  
SO International Journal for Vitamin and Nutrition Research, (1976) Vol. 46, No. 3, pp. 338-347.  
CODEN: IJVNAP  
DT Journal  
FS 037 Drug Literature Index  
018 Cardiovascular Diseases and Cardiovascular Surgery  
006 Internal Medicine  
025 Hematology  
LA English  
AB In patients with CHD the hematological and serum chemical profiles showed significantly elevated ( $P < 0.05$ ) serum cholesterol, highly significantly increased hematocrits ( $P < 0.025$  to  $P < 0.001$ ) and the erythrocyte sedimentation rates (ESR) (red cell aggregation) along with several blood constituents causal of erythrocyte aggregation were significantly elevated ( $P < 0.05$  to  $P < 0.025$ ). Thus, major defects were elevated serum cholesterol, increased blood viscosity and reduced tissue perfusion which present evidence implicates as interactive factors in the pathogenesis of CHD. Methoxylated PBP derivatives exhibited a highly significant antiadhesive action ( $P < 0.001$ ) on erythrocytes and certain PBP hydroxylated glycosides showed a significant accelerating ( $P < 0.05$ ) action on erythrocyte aggregation which causes sequestration and reduced erythrocyte concentration. Thus, the PBP derivatives exert an apparent regulatory action on erythrocyte aggregation and concentration, two major factors affecting blood viscosity and flow. The PBP compounds occur in plants and are found in certain foods which suggests dietary control of the blood high viscosity syndrome.
- L21 ANSWER 26 OF 76 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
AN 2004:330081 BIOSIS  
DN PREV200400330377  
TI Structural requirements of flavonoids for increment of ocular blood flow in the rabbit and retinal function recovery in rat eyes.  
AU Park, Young-Hyun; Xu, Xin-Rong; Chiou, George C. Y. [Reprint Author]  
CS Inst Oculat Pharmacol Coll Med, Texas A and M Univ, College Stn, TX, 77843, USA

gchiou@tamu.edu

SO Journal of Ocular Pharmacology and Therapeutics, (June 2004) Vol. 20, No. 3, pp. 189-200. print.  
ISSN: 1080-7683.

DT Article

LA English

ED Entered STN: 29 Jul 2004

Last Updated on STN: 29 Jul 2004

AB Purpose: We have recently reported that the effect of a flavonoid on ocular blood flow depends upon the number of hydroxy (OH) groups in its backbone structure. To elucidate the structural features on the number and type of functional groups present in the flavonoid molecule plus the number of OH groups, flavonoids with four to five OH groups, with or without methoxy groups, were studied on their effects to affect the ocular blood flow and the retinal function recovery. Methods: A colored microsphere technique was used to determine the ocular blood flow in albino rabbit eyes and electroretinography was used to measure the retinal function recovery. Results: Flavonols with four free OH groups produced no effects on the ocular blood flow (fisetin, kaempferol), whereas flavanone and flavones with four free OH groups and without the C2-C3 double bond produced the rapid increment on ocular blood flow (dihydrofisetin and luteolin, respectively). Similarly, flavonols with five free OH groups produced no effects on the ocular blood flow (morin, quercetin). Yet, flavanone with five free OH groups and without the C2-C3 double bond produced the rapid increment on ocular blood flow (dihydroquercetin). Flavanols with five free OH groups and without the C2-C3 double bond and the carbonyl group produced no effects on the ocular blood flow (catechin). Flavonols with four free OH groups and a methoxy group on the 7 position produced no effects on the ocular blood flow (Rhamnetin). Flavonols with four free OH groups and a methoxy group at the 5 (5-methyl-quercetin) or 3' position (isorhamnetin) produced positive effects on the ocular blood flow also. Flavonol with five methoxy groups but no OH group produced positive effects on the ocular blood flow (pentamethylquercetin). Flavonols with an excessive number of OH groups, having both a catechol-like structure in the C ring and a catechol at the B ring, produced no effect on the ocular blood flow (rhamnetin, quercetin). Parallel results were obtained on retinal function recovery after ischemic insult. Conclusion: The presence of OH groups at certain positions and the double bond at C2-C3 in the flavonoid molecules, which produces lipophilic action, can affect the increment on ocular blood flow and retinal function recovery. O-methylation can increase ocular blood flow and retinal function recovery as well.

L21 ANSWER 27 OF 76 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

AN 2002:387405 BIOSIS

DN PREV200200387405

TI Citrus flavonoid tangeretin accumulates in the brain and pre-treatment protects against dopaminergic neuronal loss in a rat model of Parkinson's disease.

AU Datla, K. P. [Reprint author]; Christidou, M. A.; Widmer, W. W.; Rooparai, H. K.; Dexter, D. T. [Reprint author]

CS Dept Neuroinflammation, Imperial College School of Science, Technology and Medicine, London, W6 8RF, UK

SO British Journal of Pharmacology, (March, 2002) Vol. 135, No. Proceedings Supplement, pp. 350P. print.

Meeting Info.: Meeting of the British Pharmacological Society. London, England, UK. December 17-21, 2001.

CODEN: BJPCBM. ISSN: 0007-1188.

DT Conference; (Meeting)  
Conference; Abstract; (Meeting Abstract)  
LA English  
ED Entered STN: 17 Jul 2002  
Last Updated on STN: 17 Jul 2002

L21 ANSWER 28 OF 76 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on  
STN  
AN 2002:510513 BIOSIS  
DN PREV200200510513  
TI Citrus flavonoid tangeretin protects against dopaminergic neuronal  
loss in a rat model of Parkinson's disease.  
AU Datla, Krishna [Reprint author]; Christidou, M. A.; Widmer, W. W.; Dexter,  
D. T. [Reprint author]  
CS Department of Neuroinflammation, Imperial College School of Science,  
Technology and Medicine, London, W6 8RF, UK  
k.datla@ic.ac.uk  
SO Abstracts of Papers American Chemical Society, (2002) Vol. 224, No. 1-2,  
pp. AGFD 4. print.  
Meeting Info.: 224th National Meeting of the American Chemical Society.  
Boston, MA, USA. August 18-22, 2002.  
CODEN: ACSRAL. ISSN: 0065-7727.

DT Conference; (Meeting)  
Conference; Abstract; (Meeting Abstract)  
LA English  
ED Entered STN: 2 Oct 2002  
Last Updated on STN: 2 Oct 2002

L21 ANSWER 29 OF 76 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on  
STN  
AN 1999:120344 BIOSIS  
DN PREV199900120344  
TI Effects of four putative anti-metastatic compounds on brain  
tumour cell migration, invasion and adhesion in vitro.  
AU Maidment, Stephen L.; Kandaneeratchi, Apsara; Pilkington, Geoffrey J.  
CS Dep. Neuropathology, Inst. Psychiatry, London SE5 8AF, UK  
SO Anticancer Research, (Nov.-Dec., 1998) Vol. 18, No. 6C, pp. 5002. print.  
Meeting Info.: Sixth International Conference of Anticancer Research.  
Kallithea, Halkidiki, Greece. October 21-25, 1998.  
CODEN: ANTRD4. ISSN: 0250-7005.

DT Conference; (Meeting)  
Conference; Abstract; (Meeting Abstract)  
LA English  
ED Entered STN: 12 Mar 1999  
Last Updated on STN: 12 Mar 1999

L21 ANSWER 30 OF 76 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on  
STN  
AN 1996:128142 BIOSIS  
DN PREV199698700277  
TI Interactions of flavonoids and other phytochemicals with adenosine  
receptors.  
AU Ji, Xiao-Duo; Melman, Neli; Jacobson, Kenneth A. [Reprint author]  
CS Mol. Recognition Section, NIDDK, NIH, Bldg. 8A, Rm. B1A-19, Bethesda, MD  
20892-0810, USA  
SO Journal of Medicinal Chemistry, (1996) Vol. 39, No. 3, pp. 781-788.  
CODEN: JMCMAR. ISSN: 0022-2623.

DT Article  
LA English

ED Entered STN: 27 Mar 1996  
Last Updated on STN: 2 May 1996

AB Flavone derivatives and other phytochemicals were found to bind to three subtypes of adenosine receptors in the micromolar range. Affinity was determined in radioligand binding assays at rat **brain** A-1 and A-2A receptors using (3H)-N-6-PIA ((3H)-(R)-N-6-phenylisopropyladenosine) and (3H)CGS21680 ((3H)-2-((4-(2-carboxyethyl)phenyl)ethylamino)-5'-(N-ethylcarbamoyl)adenosine), respectively. Affinity was determined at cloned human and rat **brain** A-3 receptors using (125I)AB-MECA(N-6-(4-amino-3-iodobenzyl)adenosine-5'-(N-methyluronamide)). A structure-activity analysis indicated that the hydroxyl groups of naturally occurring flavones are not essential for affinity at adenosine receptors. Galangin, 14, displayed K-i values of 1  $\mu$ -M at both rat A1 and A2A receptors and 3  $\mu$ -M at human A-3 receptors. Methylation but not acetylation of the hydroxyl groups of galangin enhanced A-3 affinity. Pentamethylmorin, 20, appeared to bind with 14-17-fold selectivity for human A-3 receptors vs rat A1 and A2A receptors, with a K-i value of 2.65  $\mu$ -M. Two flavone derivatives (14 and 15) showed 14-fold greater affinity at human vs rat A-3 receptors. Reduction of the 2,3-olefinic bond, as in (+)-dihydroquercetin, or glycosidation, as in robinin, greatly diminished affinity. An isoflavone, genistein, also bound only very weakly at A-3 receptors.  $\alpha$ -Naphthoflavone had greater receptor affinity (0.79  $\mu$ -M at A-1 receptors) than the beta-isomer. Other natural products of plant origin, including oxogalanthine lactam, hematoxylin, and arborinine were found to bind to A-1 adenosine receptors with K-i values of 3-13,  $\mu$ -M. These findings indicate that the flavones, flavonols, flavanones, and other phytochemicals may provide leads for the development of novel adenosine antagonists. The unexpected finding of considerable affinity of flavones at both rat and human As receptors may explain some of the previously observed biological effects of these compounds.

L21 ANSWER 31 OF 76 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

AN 1995:348669 BIOSIS

DN PREV199598362969

TI Antitumor agents, 154, Cytotoxic and antimitotic flavonols from Polansia dodecandra.

AU Shi, Qian; Chen, Ke; Li, Leping; Chang, Jer-Jang; Autry, Cari; Kozuka, Mutsuo; Konoshima, Takao; Estes, James R.; Lin, Chi M.; Hamel, Ernest; McPhail, Andrew T.; McPhail, Donald R.; Lee, Huo-Hsiung

CS Natural Products Lab., Div. Med. Chem. Natural Products, Sch. Pharmacy, Univ. North Carolina, Chapel Hill, NC 27599, USA

SO Journal of Natural Products (Lloydia), (1995) Vol. 58, No. 4, pp. 475-482.. CODEN: JNPRDF. ISSN: 0163-3864.

DT Article

LA English

ED Entered STN: 10 Aug 1995  
Last Updated on STN: 13 Sep 1995

AB Three flavonols, 5,3'-dihydroxy-3,6,7,8,4'-pentamethoxyflavone (1), 5,4'-dihydroxy-3,6,7,8,3'-pentamethoxyflavone (2), and quercetin 3-O-beta-D-glucopyranosyl-7-O-alpha-L-rhamnopyranoside (3), were isolated from Polansia dodecandra. Compound 1 showed remarkable cytotoxicity in vitro against panels of central **nervous system** cancer (SF-268, SF-539, SNB-75, U-251), non-small cell lung cancer (HOP-62, NCI-H266, NCI-H460, NCI-H522), small cell lung cancer (DMS-114), ovarian cancer (OVCAR-3, SK-OV-3), colon cancer (HCT-1 16), renal cancer (UO-31), a melanoma cell line (SK-MEL-5), and two leukemia cell lines (HL-60 (TB), SR), with GI-50 values in the low micromolar to nanomolar concentration range. This substance also inhibited tubulin polymerization (IC-50

1=0.83+-0.2  $\mu$ M) and the binding of radiolabeled colchicine to tubulin with 59% inhibition when present in equimolar concentrations with colchicine. Compound 2 also showed cytotoxicity against medulloblastoma (TE-671) tumor cells with an ED-50 value of 0.98  $\mu$ g/ml. Compound 1 appears to be the first example of a flavonol to exhibit potent inhibition of tubulin polymerization and, therefore, warrants further investigation as an antimitotic agent.

L21 ANSWER 32 OF 76 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

AN 1996:81161 BIOSIS

DN PREV199698653296

TI Highly methoxylated flavones from *Neoraputia paraensis*.

AU Souza, J. P. I.; Arruda, A. C.; Arruda, M. P. S.

CS Univ. Federal do Para, Dep. Qimica, Lab. Quimica Pesquisa, P. Box 10101, Cep 66065 Belem, Para, Brazil

SO Fitoterapia, (1995) Vol. 66, No. 5, pp. 465-466.

CODEN: FTRPAE. ISSN: 0367-326X.

DT Article

LA English

ED Entered STN: 27 Feb 1996

Last Updated on STN: 10 Jun 1997

L21 ANSWER 33 OF 76 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

AN 1995:225565 BIOSIS

DN PREV199598239865

TI Cardiotonic Flavonoids from Citrus Plants (Rutaceae).

AU Itoigawa, Masataka [Reprint author]; Takeya, Kazumi; Furukawa, Hiroshi

CS Tokaigakuen Women's Coll., Nakahira, Tempaku-ku, Nagoya 468, Japan

SO Biological and Pharmaceutical Bulletin, (1994) Vol. 17, No. 11, pp. 1519-1521.

ISSN: 0918-6158.

DT Article

LA English

ED Entered STN: 31 May 1995

Last Updated on STN: 11 Jul 1995

AB Two flavonoids, 3,5,6,7,8,3',4'-heptamethoxyflavone (HEPTA) and natsudaïdain isolated from Citrus plants (Rutaceae), produced a positive inotropic effect (PIE) on guinea-pig papillary muscle. Natsudaïdain (pD-2 4.98 +- 0.07) was more potent than HEPTA (pD-2 4.33+-0.08), but the maximum PIE of HEPTA was greater than that of natsudaïdain. The PIE of HEPTA was completely inhibited by reserpinization of the guinea pig, and partially inhibited by metoprolol and carbachol. The carbachol inhibition was omitted by atropine. The mechanism of PIE of HEPTA is accounted for catecholamine release from cardiac tissue.

L21 ANSWER 34 OF 76 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

AN 1993:53594 BIOSIS

DN PREV199395029896

TI Differential inhibition of proliferation of human squamous cell carcinoma, gliosarcoma and embryonic fibroblast-like lung cells in culture by plant flavonoids.

AU Kandaswami, Chithan; Perkins, Eddie; Drzewiecki, Gary; Soloniuk, Donald S.; Middleton, Elliott, Jr. [Reprint author]

CS Dep. Med., Div. Allergy Immunology, 100 High Street, Buffalo, N.Y. 14203, USA

SO Anti-Cancer Drugs, (1992) Vol. 3, No. 5, pp. 525-530.

CODEN: ANTDEV. ISSN: 0959-4973.

DT Article  
LA English  
ED Entered STN: 13 Jan 1993  
Last Updated on STN: 17 Mar 1993  
AB We investigated the antiproliferative effect of two polyhydroxylated (quercetin and taxifolin) and two polymethoxylate (nobiletin and tangeretin) flavonoids against three cell lines in tissue culture. Tangeretin and nobiletin markedly inhibited the proliferation of a squamous cell carcinoma (HTB 43) and a gliosarcoma (9L) cell line at 2-8 mu-g/ml concentrations. Quercetin displayed no effect on 9L cell growth at these concentrations, while at 8 mu-g/ml it inhibited HTB 43 cell growth. Taxifolin slightly inhibited HTB 43 cell growth at 8 mu-g/ml, while moderately inhibiting HTB 43 cell growth at 2-8 mu-g/ml. The proliferation of a human lung fibroblast-like cell line (CCL 135) was relatively insensitive to low concentrations of the above flavonoids.

L21 ANSWER 35 OF 76 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
AN 1983:302023 BIOSIS  
DN PREV198376059515; BA76:59515  
TI INHIBITION OF CYCLIC AMP PHOSPHO DI ESTERASE BY FLAVONOIDS.  
AU NIKAIDO T [Reprint author]; OHMOTO T; SANKAWA U; HAMANAKA T; TOTSUKA K  
CS FACULTY PHARMACEUTICAL SCIENCES, TOHO UNIV, 2-2-1, MIYAMA, FUNABASHI, CHIBA, JPN  
SO Planta Medica, (1982) Vol. 46, No. 3, pp. 162-166.  
CODEN: PLMEAA. ISSN: 0032-0943.  
DT Article  
FS BA  
LA ENGLISH  
AB Nobiletin and irigenin were identified as inhibitors of cAMP phosphodiesterase, which were contained in peels of immature fruits of [the medicinal plants] (Citrus reticulata Blanco (Japanese name Seihi) and in rhizomes of Iris florentina L. The structure activity relationships of 33 flavonoids were studied and polymethoxy flavonoids were generally more inhibitory against cAMP phosphodiesterase than corresponding polyhydroxy flavonoids. Nobiletin, irigenin and pentamethyl quercetin showed inhibitory effect on barium sulfate transport in the small intestine of mice. Further pharmacological investigations have revealed that these flavonoids have cholinergic activity.

L21 ANSWER 36 OF 76 USPATFULL on STN DUPLICATE 2  
AN 2003:152287 USPATFULL  
TI Composition and method for prevention, reduction and treatment of radiation dermatitis  
IN Rosenbloom, Richard Allen, Elkins Park, PA, UNITED STATES  
PI US 2003103953 A1 20030605  
US 6753325 B2 20040622  
AI US 2001-993003 A1 20011106 (9)  
DT Utility  
FS APPLICATION  
LREP KNOBLE & YOSHIDA, EIGHT PENN CENTER, SUITE 1350, 1628 JOHN F KENNEDY BLVD, PHILADELPHIA, PA, 19103  
CLMN Number of Claims: 11  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 642  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB A composition for the preventing, reducing or treating radiation

dermatitis includes a mixture of one or more compounds that regulates cell differentiation and/or cell proliferation, and one or more antioxidants formulated in a pharmaceutically acceptable carrier. The composition of the present invention may further include a flavonoid. A method for the topical administration of the composition in accordance with the present invention for the purpose of preventing, reducing or treating radiation dermatitis involves topically administering an effective amount of the composition of the invention an area of skin which has been or will be exposed to radiation. The composition and method can be employed to prevent, reduce or treat radiation dermatitis caused by a wide variety of types of radiation exposure and is particularly useful for the prevention, reduction or treatment of radiation recall dermatitis.

L21 ANSWER 37 OF 76 USPATFULL on STN DUPLICATE 4  
 AN 2002:214230 USPATFULL  
 TI Method and composition for the topical treatment of diabetic  
**neuropathy**  
 IN Rosenbloom, Richard Allen, Elkins Park, PA, UNITED STATES  
 PI US 2002115618 A1 20020822  
 US 6555573 B2 20030429  
 AI US 2000-740811 A1 20001221 (9)  
 DT Utility  
 FS APPLICATION  
 LREP KNOBLE & YOSHIDA, EIGHT PENN CENTER, SUITE 1350, 1628 JOHN F KENNEDY  
 BLVD, PHILADELPHIA, PA, 19103  
 CLMN Number of Claims: 26  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 666

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method and composition for the treatment of diabetic **neuropathy** is disclosed. The composition comprises a cold compounded mixture of a compound that promotes synthesis of nerve growth factor, an aldose reductase inhibitor and an antioxidant formulated in a pharmaceutically acceptable carrier. It has been found that this combination of active agents provides significant, effective relief of the symptoms of diabetic **neuropathy**, as well as at least partial recovery of lost **neurological** function in some cases. In view of the consensus in the art that effective combinations of various active agents have not been demonstrated to be effective for the treatment of diabetic **neuropathy**, the present invention provides a surprising and unexpected effect. In addition, the topical compositions of the present invention, when used in effective amounts to treat diabetic **neuropathy**, do not exhibit the severe side effects of many prior art compositions proposed for treatment of this ailment,

In a second aspect, a method for the topical administration of a composition in accordance with the present invention for the treatment of diabetic **neuropathy** is disclosed. In the method, an effective amount of the composition of the invention is topically administered to the areas of the body that have been adversely affected by the diabetic **neuropathy** on a regular basis over a period of time sufficient to provide the beneficial effects of relief from the symptoms and at least some recover of the damaged nerve tissues.

L21 ANSWER 38 OF 76 USPATFULL on STN  
 AN 2005:57313 USPATFULL



TI Compounds that act to modulate insect growth and methods and systems for identifying such compounds  
IN Henrich, Vincent C., Greensboro, NC, UNITED STATES  
Weinberger, Cary Alan, Carrboro, NC, UNITED STATES  
PI US 2005049230 A1 20050303  
AI US 2004-929090 A1 20040827 (10)  
PRAI US 2003-498847P 20030829 (60)  
DT Utility  
FS APPLICATION  
LREP KILPATRICK STOCKTON LLP, 1001 WEST FOURTH STREET, WINSTON-SALEM, NC, 27101  
CLMN Number of Claims: 75  
ECL Exemplary Claim: 1  
DRWN 23 Drawing Page(s)  
LN.CNT 3130

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are methods and systems for screening for compounds that act to modulate insect growth. Bioassays including cell culture and/or transgenic insects engineered with various components of the ecdysoid receptor (EcR) and/or the farnesoid-X receptor (RXR) systems to identify compounds that act as insecticides and/or hormone receptor activators are described. Also described are compounds, and compositions, identified as being putative insecticides based upon their ability to activate EcR and/or RXR mediated transcription.

L21 ANSWER 39 OF 76 USPATFULL on STN

AN 2004:274380 USPATFULL

TI Compositions and methods of treating, reducing and preventing cardiovascular diseases and disorders with polymethoxyflavones

IN Guthrie, Najla, London, CANADA

Kurowska, Elzbieta Maria, Ontario, CANADA

Manthey, John A., Auburndale, FL, UNITED STATES

PI US 2004214882 A1 20041028

AI US 2004-854063 A1 20040526 (10)

RLI Continuation of Ser. No. US 2000-528488, filed on 17 Mar 2000, PENDING  
Continuation-in-part of Ser. No. US 1998-167634, filed on 6 Oct 1998, ABANDONED

DT Utility

FS APPLICATION

LREP DAVIDSON, DAVIDSON & KAPPEL, LLC, 14th Floor, 485 Seventh Avenue, New York, NY, 10018

CLMN Number of Claims: 21

ECL Exemplary Claim: CLM-01-12

DRWN No Drawings

LN.CNT 553

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the treatment, reduction and/or prevention of cardiovascular diseases and disorders are described. Individuals at high risk for developing or having cardiovascular disease or disorder may be treated with an effective dose of a polymethoxyflavone including limocitrin derivatives, quercetin derivatives, naturally occurring polymethoxyflavones, tocotrienols, and mixtures of these compounds.

L21 ANSWER 40 OF 76 USPATFULL on STN

AN 2004:253747 USPATFULL

TI Compositions and methods for therapy for diseases characterized by defective chloride transport

IN Fischer, Horst, Albany, CA, UNITED STATES

Illek, Beate, Albany, CA, UNITED STATES

PA Children's Hospital Oakland, Oakland, CA, UNITED STATES, 94609-1673  
(U.S. corporation)

PI US 2004197272 A1 20041007

AI US 2004-769619 A1 20040130 (10)

RLI Continuation-in-part of Ser. No. US 2001-982315, filed on 17 Oct 2001,  
PENDING Division of Ser. No. US 1998-174077, filed on 16 Oct 1998,  
GRANTED, Pat. No. US 6329422 Continuation-in-part of Ser. No. US  
1997-951912, filed on 16 Oct 1997, GRANTED, Pat. No. US 5972995

DT Utility

FS APPLICATION

LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,  
SEATTLE, WA, 98104-7092

CLMN Number of Claims: 30

ECL Exemplary Claim: 1

DRWN 26 Drawing Page(s)

LN.CNT 2936

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for therapy of cystic fibrosis, asthma, and  
other conditions characterized by defective chloride transport are  
provided. The compositions comprise one or more compounds such as  
flavones and/or isoflavones, ascorbate and/or derivatives thereof  
capable of stimulating chloride transport in epithelial tissues.  
Therapeutic methods involve the administration (e.g., orally or via  
inhalation) of such compositions to a patient afflicted with cystic  
fibrosis, asthma, and/or another condition responsive to stimulation of  
chloride transport.

L21 ANSWER 41 OF 76 USPATFULL on STN

AN 2004:209813 USPATFULL

TI Therapeutic agent or osteoporosis comprising an active ingredient of  
quercetin derivatives

IN Kim, Chung-Sook, Seoul, KOREA, REPUBLIC OF  
Ha, Hye-Kyung, Seoul, KOREA, REPUBLIC OF  
Song, Kye-Yong, Seoul, KOREA, REPUBLIC OF

PI US 2004162247 A1 20040819

AI US 2004-783084 A1 20040219 (10)

RLI Continuation of Ser. No. US 2002-70047, filed on 22 Feb 2002, ABANDONED  
A 371 of International Ser. No. WO 2001-KR368, filed on 9 Mar 2001,  
UNKNOWN

PRAI KR 20000814

DT Utility

FS APPLICATION

LREP KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR,  
IRVINE, CA, 92614

CLMN Number of Claims: 15

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1093

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a therapeutic agent for osteoporosis  
which comprises an active ingredient of quercetin derivatives. The  
quercetin derivatives of the invention can be practically applied for  
the treatment and prevention of osteoporosis, since they effectively  
inhibit osteoclast proliferation and stimulate osteoblast proliferation  
more than conventional therapeutic agents for osteoporosis, and increase  
trabecular bone area highly without changing hormone level in body and  
untoward effects on hematopoietic function and immune system.

L21 ANSWER 42 OF 76 USPATFULL on STN

AN 2004:197454 USPATFULL  
TI Polyhydroxylated aromatic compounds for the treatment of amyloidosis and  
alpha-synuclein fibril diseases  
IN Castillo, Gerardo M., Seattle, WA, UNITED STATES  
Choi, Paula Y., Bothell, WA, UNITED STATES  
Snow, Alan D., Lynnwood, WA, UNITED STATES  
PI US 2004152760 A1 20040805  
AI US 2004-762444 A1 20040121 (10)  
RLI Continuation of Ser. No. US 2000-748748, filed on 26 Dec 2000, PENDING  
PRAI US 1999-173958P 19991230 (60)  
DT Utility  
FS APPLICATION  
LREP Stephanie Seidman, Heller Ehrman White & McAuliffe LLP, 7th Floor, 4350  
La Jolla Village Drive, San Diego, CA, 92122  
CLMN Number of Claims: 11  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1389

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polyhydroxylated aromatic compounds, and compositions containing them,  
are useful for the treatment of amyloidosis, especially  
**Alzheimer's** disease, and for the treatment of diseases  
characterized by  $\alpha$ -synuclein fibril formation, especially Lewy  
body disease and Parkinson's disease.

L21 ANSWER 43 OF 76 USPATFULL on STN

AN 2004:172507 USPATFULL  
TI Quercetin derivatives and their medical usages  
IN Zhao, Yimin, Beijing, CHINA  
Yang, Ming, Beijing, CHINA  
Li, Yunfeng, Beijing, CHINA  
Luan, Xinhui, Beijing, CHINA  
Luo, Zhipu, Beijing, CHINA  
PA ACADEMY OF MILITARY MEDICAL SCIENCES INSTITUTE OF PHARMACOLOGY AND  
TOXICOLOGY (non-U.S. corporation)  
PI US 2004132671 A1 20040708  
AI US 2003-673030 A1 20030926 (10)  
RLI Continuation of Ser. No. WO 2002-CN198, filed on 3 Mar 2002, UNKNOWN  
PRAI US 2001-278841P 20010326 (60)  
DT Utility  
FS APPLICATION  
LREP LADAS & PARRY, 26 WEST 61ST STREET, NEW YORK, NY, 10023  
CLMN Number of Claims: 11  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 445

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to quercetin derivative, its preparation, and a  
pharmaceutical combination, as well as their medical uses for the  
prevention or treatment of diseases related to 5HT.sub.1A receptor or  
**neuron** cell damages, including Alzheimer's disease, drug or  
alcohol dependence, sleep disorders or panic state; and for delaying  
senility, improving learning and memory, preventing and treatment of  
**neuron** cell damages caused by various kinds of cerebral damages.

L21 ANSWER 44 OF 76 USPATFULL on STN

AN 2004:114670 USPATFULL  
TI Methods for the treatment of peripheral **neural** and vascular  
ailments

IN Rosenbloom, Richard A., Elkins Park, PA, UNITED STATES  
PI US 2004087516 A1 20040506  
AI US 2002-288825 A1 20021106 (10)  
DT Utility  
FS APPLICATION  
LREP Kevin J. Dunleavy, KNOBLE & YOSHIDA, LLC, Eight Penn Center, 1628 John  
F. Kennedy Blvd., Philadelphia, PA, 19103  
CLMN Number of Claims: 29  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1022  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the treatment of peripheral **neural**  
and vascular ailments are disclosed. The method comprises administering  
a flavonoid compound with antioxidant properties, optionally formulated  
in a acceptable carrier. This compound or combination of compounds  
provides significant, effective relief of the symptoms of peripheral  
**neural** or vascular ailments. In addition, the compositions, when  
used according to the methods of the present invention, do not exhibit  
the severe side effects of many prior art compositions proposed for  
treatment of these ailments.

L21 ANSWER 45 OF 76 USPATFULL on STN

AN 2004:70630 USPATFULL

TI Method of treating symptoms of common cold, allergic rhinitis and  
infections relating to the respiratory tract

IN Berg, Kurt Frimann, Charlottenlund, DENMARK

PI US 2004053858 A1 20040318

AI US 2003-363430 A1 20030922 (10)

WO 2001-DK515 20010723

PRAI DK 2000-1152 20000728

DK 2000-1316 20000904

DK 2000-1935 20001223

DK 2001-7 20010130

DK 2001-827 20010522

DT Utility

FS APPLICATION

LREP BROWDY AND NEIMARK, P.L.L.C., 624 NINTH STREET, NW, SUITE 300,  
WASHINGTON, DC, 20001-5303

CLMN Number of Claims: 35

ECL Exemplary Claim: 1

DRWN 7 Drawing Page(s)

LN.CNT 1715

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods of treating conditions and/or  
symptoms related to common cold of the upper and/or lower respiratory  
tract and/or eyes. In particular the invention relates to the methods of  
treating conditions and/or symptoms related to common cold comprising  
administration of a flavonoid or administration of a flavonoid in  
combination with a metal. The invention furthermore describes  
compositions comprising a metal and a flavonoid useful for the treatment  
of conditions and/or symptoms relates to common cold.

L21 ANSWER 46 OF 76 USPATFULL on STN

AN 2003:213343 USPATFULL

TI Extraction of flavonoids

IN Wallace, Robert Gerard, Willetton, AUSTRALIA

Burong, Willfrits Gerald, Ballajura, AUSTRALIA

PI US 2003147980 A1 20030807

AI US 2002-169968 A1 20021022 (10)  
WO 2001-AU16 20010111  
PRAI AU 2000-5043 20000111  
DT Utility  
FS APPLICATION  
LREP MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN, 55402-0903  
CLMN Number of Claims: 39  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1321

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of producing an enriched flavonoid aglycone extract from starting material containing a suitable flavonoid glycoside and/or conjugate thereof comprising the steps of: (i) enzymatically converting the flavonoid glycoside or conjugate thereof into the flavonoid aglycone; (ii) adjusting the pH to render the flavonoid aglycone soluble and removing the insoluble fraction; and (iii) adjusting the pH to render the soluble flavonoid aglycone relatively insoluble and forming an extract containing the same.

L21 ANSWER 47 OF 76 USPATFULL on STN

AN 2003:200535 USPATFULL  
TI Confectionery products containing active ingredients  
IN Bell, David Alan, York, UNITED KINGDOM  
Pickford, Emma, Epalinges, SWITZERLAND  
PI US 2003138520 A1 20030724  
AI US 2002-328913 A1 20021220 (10)  
RLI Continuation of Ser. No. WO 2001-EP6363, filed on 6 Jun 2001, UNKNOWN  
PRAI GB 2000-16173 20000630  
DT Utility  
FS APPLICATION  
LREP WINSTON & STRAWN, PATENT DEPARTMENT, 1400 L STREET, N.W., WASHINGTON, DC, 20005-3502  
CLMN Number of Claims: 29  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 330

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A confectionery product, e.g., chocolate, containing one or more active ingredients therein. These active ingredients are incorporated in a plurality of carrier bodies that are dispersed within the body of the confectionery product.

L21 ANSWER 48 OF 76 USPATFULL on STN

AN 2003:200519 USPATFULL  
TI Method and composition for the topical treatment of diabetic neuropathy  
IN Rosenbloom, Richard Allen, Elkins Park, PA, UNITED STATES  
PI US 2003138504 A1 20030724  
AI US 2003-369025 A1 20030219 (10)  
RLI Division of Ser. No. US 2000-740811, filed on 21 Dec 2000, GRANTED, Pat. No. US 6555573  
DT Utility  
FS APPLICATION  
LREP KNOBLE & YOSHIDA, EIGHT PENN CENTER, SUITE 1350, 1628 JOHN F KENNEDY BLVD, PHILADELPHIA, PA, 19103  
CLMN Number of Claims: 26  
ECL Exemplary Claim: 1  
DRWN No Drawings

LN.CNT 667

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method and composition for the treatment of diabetic **neuropathy** is disclosed. The composition comprises a cold compounded mixture of a compound that promotes synthesis of nerve growth factor, an aldose reductase inhibitor and an antioxidant formulated in a pharmaceutically acceptable carrier. It has been found that this combination of active agents provides significant, effective relief of the symptoms of diabetic **neuropathy**, as well as at least partial recovery of lost **neurological** function in some cases. In view of the consensus in the art that effective combinations of various active agents have not been demonstrated to be effective for the treatment of diabetic **neuropathy**, the present invention provides a surprising and unexpected effect. In addition, the topical compositions of the present invention, when used in effective amounts to treat diabetic **neuropathy**, do not exhibit the severe side effects of many prior art compositions proposed for treatment of this ailment.

In a second aspect, a method for the topical administration of a composition in accordance with the present invention for the treatment of diabetic **neuropathy** is disclosed. In the method, an effective amount of the composition of the invention is topically administered to the areas of the body that have been adversely affected by the diabetic **neuropathy** on a regular basis over a period of time sufficient to provide the beneficial effects of relief from the symptoms and at least some recovery of the damaged nerve tissues.

L21 ANSWER 49 OF 76 USPATFULL on STN

AN 2003:172692 USPATFULL

TI Topical compositions and methods for treatment of adverse effects of ionizing radiation

IN Rosenbloom, Richard A., Elkins Park, PA, UNITED STATES

PI US 2003118536 A1 20030626

AI US 2002-288761 A1 20021106 (10)

RLI Continuation-in-part of Ser. No. US 2002-132642, filed on 25 Apr 2002, PENDING Continuation-in-part of Ser. No. US 2002-45790, filed on 14 Jan 2002, PENDING Continuation-in-part of Ser. No. US 2001-993003, filed on 6 Nov 2001, PENDING

DT Utility

FS APPLICATION

LREP KNOBLE &amp; YOSHIDA, EIGHT PENN CENTER, SUITE 1350, 1628 JOHN F KENNEDY BLVD, PHILADELPHIA, PA, 19103

CLMN Number of Claims: 40

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1162

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the prevention, reduction or treatment of adverse effects due to exposure to ionizing radiation, including at least one flavonoid and at least one non-flavonoid antioxidant, optionally formulated in a acceptable carrier for a topical composition. The composition of the present invention may further include optional ingredients such as selenium, selenium compounds, anti-inflammatories, organic germanium compounds, compounds that regulate cell differentiation, Korean ginseng, American ginseng, Siberian ginseng and B-complex vitamins. A method for the topical administration of the composition in accordance with the present invention for the purpose of reducing, treating or preventing adverse effects caused by ionizing

radiation involves topically administering a safe and effective amount of the composition of the invention an area of skin, which has been, is being or will be exposed to ionizing radiation. The compositions and methods can be employed to reduce, treat or prevent radiation injury caused by a wide variety of types of exposure to ionizing radiation.

L21 ANSWER 50 OF 76 USPATFULL on STN  
AN 2003:153363 USPATFULL  
TI Methods for the treatment of skin disorders  
IN Rosenbloom, Richard A., Elkins Park, PA, UNITED STATES  
PI US 2003105031 A1 20030605  
AI US 2002-279315 A1 20021024 (10)  
RLI Continuation-in-part of Ser. No. US 2002-132642, filed on 25 Apr 2002, PENDING Continuation-in-part of Ser. No. US 2002-45790, filed on 14 Jan 2002, PENDING Continuation-in-part of Ser. No. US 2001-993003, filed on 6 Nov 2001, PENDING  
DT Utility  
FS APPLICATION  
LREP KNOBLE & YOSHIDA, EIGHT PENN CENTER, SUITE 1350, 1628 JOHN F KENNEDY BLVD, PHILADELPHIA, PA, 19103  
CLMN Number of Claims: 25  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1028  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for the reduction, treatment or partial prevention of reactive and inflammatory dermatoses, including eczema and psoriasis, are provided. The methods comprise administering a composition that includes one or more flavonoids and is optionally formulated in a pharmaceutically acceptable carrier. Also provided are methods of facilitating the healing of wounds, and of cleansing, beautifying, and improving the cosmetic appearance of the skin. Further optional ingredients may be added to the composition used in the present invention, such as non-flavonoid antioxidants, and one or more compounds that regulate cell differentiation and/or cell proliferation. The composition may be administered as a topical composition.

L21 ANSWER 51 OF 76 USPATFULL on STN  
AN 2003:153359 USPATFULL  
TI Nutritional supplements and methods for prevention, reduction and treatment of radiation injury  
IN Rosenbloom, Richard A., Elkins Park, PA, UNITED STATES  
PI US 2003105027 A1 20030605  
AI US 2002-132642 A1 20020425 (10)  
RLI Continuation-in-part of Ser. No. US 2002-45790, filed on 14 Jan 2002, PENDING Continuation-in-part of Ser. No. US 2001-993003, filed on 6 Nov 2001, PENDING  
DT Utility  
FS APPLICATION  
LREP KNOBLE & YOSHIDA, EIGHT PENN CENTER, SUITE 1350, 1628 JOHN F KENNEDY BLVD, PHILADELPHIA, PA, 19103  
CLMN Number of Claims: 39  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1404  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A nutritional supplement composition for the prevention, reduction or treatment of radiation injury due to exposure to ionizing radiation, including one or more compounds that regulates cell differentiation

and/or cell proliferation, and one or more antioxidants, optionally formulated in a pharmaceutically acceptable carrier for an oral composition. The composition of the present invention may further include optional ingredients such as flavonoids, flavonoid derivatives, selenium, selenium compounds, anti-inflammatories, organic germanium, Korean ginseng, American ginseng, Siberian ginseng and B-complex vitamins. A method for the administration of an oral composition for the purpose of preventing, reducing or treating radiation injury involves orally administering an effective amount of a composition including one or more compounds that regulates cell differentiation and/or cell proliferation, and one or more antioxidants to a person before, during or after radiation exposure. A method for the topical administration of the composition in accordance with the present invention for the purpose of preventing, reducing or treating radiation injury involves topically administering an effective amount of the composition of the invention on an area of skin, which has been or will be exposed to ionizing radiation. The compositions and methods can be employed to prevent, reduce or treat radiation injury caused by a wide variety of types of radiation exposure.

L21 ANSWER 52 OF 76 USPATFULL on STN  
 AN 2003:152288 USPATFULL  
 TI Oral compositions and methods for prevention, reduction and treatment of radiation injury  
 IN Rosenbloom, Richard A., Elkios Park, PA, UNITED STATES  
 PI US 2003103954 A1 20030605  
 AI US 2002-45790 A1 20020114 (10)  
 RLI Continuation-in-part of Ser. No. US 2001-993003, filed on 6 Nov 2001, PENDING  
 DT Utility  
 FS APPLICATION  
 LREP KNOBLE & YOSHIDA, EIGHT PENN CENTER, SUITE 1350, 1628 JOHN F KENNEDY BLVD, PHILADELPHIA, PA, 19103  
 CLMN Number of Claims: 37  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 1221  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB An oral composition for the prevention, reduction or treatment of radiation injury including one or more compounds that regulates cell differentiation and/or cell proliferation, and one or more antioxidants, optionally formulated in a pharmaceutically acceptable carrier for an oral composition. The composition of the present invention may further include optional ingredients such as flavonoids, flavonoid derivatives, selenium, selenium compounds, anti-inflammatories, organic germanium, Korean ginseng, American ginseng, Siberian ginseng and B-complex vitamins. A method for the administration of an oral composition for the purpose of preventing, reducing or treating radiation injury involves orally administering an effective amount of a composition including one or more compounds that regulates cell differentiation and/or cell proliferation, and one or more antioxidants to a person before, during or after radiation exposure. The compositions and methods can be employed to prevent, reduce or treat radiation injury caused by a wide variety of types of radiation exposure.

L21 ANSWER 53 OF 76 USPATFULL on STN  
 AN 2003:168830 USPATFULL  
 TI Stable carotene-xanthophyll beadlet compositions and methods of use  
 IN Lang, John C., Arlington, TX, United States



PA Alcon, Inc., Hunenberg, SWITZERLAND (non-U.S. corporation)  
PI US 6582721 B1 20030624  
AI US 1999-397472 19990917 (9)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Dodson, Shelley A.  
LREP Schultz, Teresa J.  
CLMN Number of Claims: 40  
ECL Exemplary Claim: 1  
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)  
LN.CNT 830  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Beadlets comprising xanthophylls and carotenes and/or retinoids, dietary supplements comprising these beadlets and methods of use are disclosed.

L21 ANSWER 54 OF 76 USPATFULL on STN  
AN 2003:115828 USPATFULL  
TI Use of cirsiol and derivatives to treat infections  
IN Prendergast, Patrick T., Baybrush, Straffan, County Kildare, IRELAND  
PI US 6555523 B1 20030429  
AI US 2000-612025 20000707 (9)  
PRAI US 1999-142894P 19990708 (60)  
US 1999-163089P 19991102 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Horlick, Kenneth R.  
LREP Callahan, Heather L.  
CLMN Number of Claims: 22  
ECL Exemplary Claim: 1  
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)  
LN.CNT 2180

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB The invention provides the use of flavin compounds such as cirsiol, 3',4'-diacetoxy-5,6,7-trimethoxyflavone or naringin in the treatment of infections, particularly for viral (e.g., HCV, HIV, a picornavirus genus virus or a respiratory virus) or parasite (e.g., toxoplasmosis) infections. Also provided are compositions for use in the methods.

L21 ANSWER 55 OF 76 USPATFULL on STN  
AN 2002:295161 USPATFULL  
TI Compositions and methods for the treatment of diabetic neuropathy  
IN Rosenbloom, Richard, Elkins Park, PA, UNITED STATES  
PI US 2002165207 A1 20021107  
AI US 2001-847121 A1 20010502 (9)  
DT Utility  
FS APPLICATION  
LREP Knoble & Yoshida, LLC, Eight Penn Center, Suite 1350, 1628 John F. Kennedy Blvd., Philadelphia, PA, 19103  
CLMN Number of Claims: 25  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 628


CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Compositions and a method for the treatment of diabetic neuropathy is disclosed. The compositions comprise a mixture of a compound that promotes synthesis of nerve growth factor, an aldose reductase inhibitor and an antioxidant, optionally formulated in a pharmaceutically acceptable carrier. This combination of active agents

provides significant, effective relief of the symptoms of diabetic **neuropathy**, as well as at least partial recovery of lost **neurological** function in some cases. In addition, the compositions of the present invention, when used in effective amounts to treat diabetic **neuropathy**, do not exhibit the severe side effects of many prior art compositions proposed for treatment of this ailment.

In a second aspect, a method for the administration of a composition in accordance with the present invention for the treatment of diabetic **neuropathy** is disclosed. In the method, an effective amount of the composition of the invention is administered on a regular basis over a period of time sufficient to provide the beneficial effects of relief from the symptoms of diabetic **neuropathy**, as well as at least some recovery of the damaged nerve tissues.

L21 ANSWER 56 OF 76 USPATFULL on STN  
 AN 2002:295123 USPATFULL  
 TI Therapeutic agent of osteoporosis comprising an active ingredient of quercetin derivatives  
 IN Kim, Chung-Sook, Seoul, KOREA, REPUBLIC OF  
 Ha, Hye-Kyung, Seoul, KOREA, REPUBLIC OF  
 Song, Kye-Yong, Seoul, KOREA, REPUBLIC OF  
 PI US 2002165169 A1 20021107  
 AI US 2002-70047 A1 20020222 (10)  
 WO 2001-KR368 20010309  
 PRAI KR 2000-46916 20000814  
 DT Utility  
 FS APPLICATION  
 LREP KNOBBE MARTENS OLSON & BEAR LLP, 620 NEWPORT CENTER DRIVE, SIXTEENTH FLOOR, NEWPORT BEACH, CA, 92660  
 CLMN Number of Claims: 15  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 1003  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The present invention relates to a therapeutic agent for osteoporosis which comprises an active ingredient of quercetin derivatives. The quercetin derivatives of the invention can be practically applied for the treatment and prevention of osteoporosis, since they effectively inhibit osteoclast proliferation and stimulate osteoblast proliferation more than conventional therapeutic agents for osteoporosis, and increase trabecular bone area highly without changing hormone level in body and untoward effects on hematopoietic function and immune system.

L21 ANSWER 57 OF 76 USPATFULL on STN  
 AN 2002:72912 USPATFULL  
 TI Method for neurite outgrowth  
 IN Ito, Hisatomi, Kobe, JAPAN  
 Tamura, Shinya, Kobe, JAPAN  
 Miyazaki, Toshitsugu, Kobe, JAPAN  
 PI US 2002040052 A1 20020404  
 AI US 2001-927038 A1 20010809 (9)  
 PRAI JP 2000-248021 20000817  
 DT Utility  
 FS APPLICATION  
 LREP AMIN & TUROCY, LLP, 1900 EAST 9TH STREET, NATIONAL CITY CENTER, 24TH FLOOR, CLEVELAND, OH, 44114  
 CLMN Number of Claims: 15



ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 701

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods for extending neurites, using a composition containing a polyalkoxyflavonoid having a specific structure, especially nobiletin or tangeretin. It is found that also a composition containing an extract from a plant belonging to the citrus family has an activity to extend neurites. These compositions are useful to prevent and/or improve or treat neurodegeneration diseases such as Alzheimer's dementia and encephalic ischemia by accelerating extension of neurites.

L21 ANSWER 58 OF 76 USPATFULL on STN

AN 2002:12571 USPATFULL

TI MODIFICATION OF CHOLESTEROL CONCENTRATIONS WITH CITUS PHYTOCHEMICALS

IN MCGILL, CARLA R., SARASOTA, FL, UNITED STATES

GREEN, NANCY R., BRADENTON, FL, UNITED STATES

PI US 2002006953 A1 20020117

AI US 1999-435304 A1 19991105 (9)

DT Utility

FS APPLICATION

LREP COOK ALEX MCFARRON MANZO, CUMMINGS & MEHLER LTD, 200 WEST ADAMS STREET, SUITE 2850, CHICAGO, IL, 60606

CLMN Number of Claims: 54

ECL Exemplary Claim: 1

DRWN 3 Drawing Page(s)

LN.CNT 796

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods, products and compositions are provided which, when administered to a mammal, including humans, raises HDL serum cholesterol levels, while typically also lowering the ratio of LDL to HDL serum cholesterol levels. An effective amount of one or more of a monoterpene, a terpene and a flavonoid are included in the treatment composition.

L21 ANSWER 59 OF 76 USPATFULL on STN

AN 2002:239045 USPATFULL

TI Neuroprotective effects of mitogen-activated protein kinase (MAPK) cascade inhibitors

IN Baskys, Andrius, 10 Cool Brook, Irvine, CA, United States 92612

PI US 6451837 B1 20020917

AI US 2000-653065 20000901 (9)

PRAI US 1999-151955P 19990901 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Gitomer, Ralph; Assistant Examiner: Khare, Devesh

LREP Cummings & Lockwood LLC

CLMN Number of Claims: 11

ECL Exemplary Claim: 1

DRWN 6 Drawing Figure(s); 2 Drawing Page(s)

LN.CNT 797

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method is provided for therapeutic use of a class of compounds that are effective in protecting nerve cells from deterioration and cell death arising from degenerative disease, trauma or aging and may be used to achieve a similar effect in male and female subjects with minimal adverse side effects. The method comprises administering a therapeutically effective dose of a natural or synthetic bioflavonoid that acts as an MAPK cascade antagonist. Examples of bioflavonoids that

may be used in the present method are apigenin and 2-(2'-amino-3'-methoxyphenyl)-oxanaphthalen-4-one (PD098059).

L21 ANSWER 60 OF 76 USPATFULL on STN  
AN 2002:224270 USPATFULL  
TI Methods of treating chronic inflammatory diseases using carbonyl trapping agents  
IN Shapiro, Howard K., 214 Price Ave., Apt. F-32, Narberth, PA, United States 19072  
PI US 6444221 B1 20020903  
AI US 1999-416120 19991012 (9)  
RLI Continuation-in-part of Ser. No. US 1995-473786, filed on 7 Jun 1995, now abandoned Continuation-in-part of Ser. No. US 1992-906909, filed on 30 Jun 1992, now abandoned  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Kulkosky, Peter F.; Assistant Examiner: Di Nola-Baron, Liliana  
CLMN Number of Claims: 26  
ECL Exemplary Claim: 1  
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)  
LN.CNT 2400

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB These and other objects of this invention are achieved by providing a novel method and compositions for the clinical treatment of chronic inflammatory diseases. This invention involves use of systemically administered compositions which include primary amine derivatives of benzoic acid as carbonyl trapping agents. These primary therapeutic agents act by chemically binding to and sequestering the aldehyde and/or ketone products of lipid peroxidation. Increased levels of lipid peroxidation have been repeatedly demonstrated as a part of the non-enzymatic "inflammatory cascade" process which underlies the secondary etiology of chronic inflammatory diseases. p-Aminobenzoic acid (or PABA) is an example of the primary therapeutic agent of the present invention. PABA has a small molecular weight, is water soluble, has a primary amine group that reacts with carbonyl-containing metabolites under physiological conditions and is tolerated by the body in relatively high dosages and for extended periods. The carbonyl sequestering agents are used in combination with at least one co-agent so as to produce an additional beneficial physiological effect of an anti-inflammatory nature. Such compositions are administered systemically entirely via the oral route. Co-agents of the present invention include anti-oxidants and free radical trapping compounds (e.g.,  $\alpha$ -tocopherol), compounds having indirect anti-oxidant activity (e.g., selenium), vitamins (e.g., pyridoxine HCl), compounds which facilitate kidney drug elimination (e.g., glycine), metabolites at risk of depletion (e.g., pantothenic acid), sulfhydryl containing chemicals (e.g., methionine), compounds which facilitate glutathione activity (e.g., N-acetylcysteine), and non-absorbable polyamine co-agents (e.g., chitosan).

L21 ANSWER 61 OF 76 USPATFULL on STN  
AN 2001:218540 USPATFULL  
TI Polyhydroxylated aromatic compounds for the treatment of amyloidosis and alpha-synuclein fibril diseases  
IN Castillo, Gerardo M., Seattle, WA, United States  
Choi, Paula Y., Bothell, WA, United States  
Snow, Alan D., Lynnwood, WA, United States  
PI US 2001047032 A1 20011129

AI US 2000-748748 A1 20001226 (9)  
PRAI US 1999-173958P 19991230 (60)  
DT Utility  
FS APPLICATION  
LREP HELLER EHRMAN WHITE & MCAULIFFE LLP, 275 MIDDLEFIELD ROAD, MENLO PARK,  
CA, 94025-3506  
CLMN Number of Claims: 30  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1536

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polyhydroxylated aromatic compounds, and compositions containing them,  
are useful for the treatment of amyloidosis, especially  
Alzheimer's disease, and for the treatment of diseases  
characterized by  $\alpha$ -synuclein fibril formation, especially Lewy  
body disease and Parkinson's disease.

L21 ANSWER 62 OF 76 USPATFULL on STN

AN 2001:218473 USPATFULL  
TI Novel use of flavones  
IN Wenzel, Uwe, Freising, Germany, Federal Republic of  
Daniel, Hannelore, Freising, Germany, Federal Republic of  
PI US 2001046963 A1 20011129  
AI US 2001-782306 A1 20010214 (9)  
PRAI US 2000-185179P 20000225 (60)  
DT Utility  
FS APPLICATION  
LREP Messrs. Keil & Weinkauff, 1101 Connecticut Ave. N.W., Washington, DC,  
20036  
CLMN Number of Claims: 12  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 781

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A pharmaceutical composition for inhibiting COX-2 biosynthesis  
comprising a therapeutically effective amount of the compound of formula  
I and a pharmaceutically acceptable carrier. ##STR1##

wherein R.sup.1 and R.sup.4 represent either Hydrogen or together a bond

R.sup.5, R.sup.6, R.sup.7, R.sup.8 represent independently of each other  
Hydrogen, Hydroxy or Methoxy; in addition R.sup.7 represents a sugar  
substituent like glucoside, rutinoid, manno gluco pyransyl,  
aprosylglucoside

R.sup.2 and R.sup.3 represent Hydrogen, Hydroxy, Methoxy or ##STR2##

wherein R.sup.2', R.sup.3', R.sup.4', R.sup.5' and R.sup.6'

are independently or each other Hydrogen, Hydroxy or Methoxy with the  
proviso, that R.sup.2 or R.sup.3 is represented by the optionally  
substituted Phenylring.

L21 ANSWER 63 OF 76 USPATFULL on STN

AN 2001:97425 USPATFULL  
TI Compositions and methods of treatment of neoplastic diseases and  
hypercholesterolemia with citrus limonoids and flavonoids and  
tocotrienols  
IN Guthrie, Najla, London, Canada

Kurowska, Elzbieta Maria, London, Canada  
Carroll, Kenneth Kitchener, London, Canada

PA KGK Synergize INC, London, Canada (non-U.S. corporation)

PI US 6251400 B1 20010626

AI US 1997-938640 19970926 (8)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Lankford, Jr., Leon B.; Assistant Examiner: Tate, Christopher R.

CLMN Number of Claims: 10

ECL Exemplary Claim: 1

DRWN 5 Drawing Figure(s); 4 Drawing Page(s)

LN.CNT 702

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the prevention and treatment of neoplastic diseases and hypercholesterolemia are described. Individuals at a high risk of developing or having neoplasia or hypercholesterolemia undergoing conventional therapies may be treated with an effective dose of triterpene derivatives in citrus limonoids, polyphenolic flavonoid citrus compounds, tocotrienols or a combination of these agents.

L21 ANSWER 64 OF 76 USPATFULL on STN

AN 2001:79139 USPATFULL

TI Compositions and methods for treatment of neoplastic diseases with combinations of limonoids, flavonoids and tocotrienols

IN Guthrie, Najla, London, Canada

Kurowska, Elzbieta Maria, London, Canada

PA KGK Synergize, London, Canada (non-U.S. corporation)

PI US 6239114 B1 20010529

AI US 2000-481963 20000112 (9)

RLI Continuation-in-part of Ser. No. US 1997-938640, filed on 26 Sep 1997, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Reamer, James H.

LREP Davidson, Davidson & Kappel, LLC

CLMN Number of Claims: 36

ECL Exemplary Claim: 1,17

DRWN No Drawings

LN.CNT 647

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the prevention and treatment of neoplastic diseases are described. Individuals at a high risk of developing or having neoplasia undergoing conventional therapies may be treated with an effective dose of triterpene derivatives in limonoids, polyphenolic flavonoid compounds, tocotrienols or a combination of these agents.

L21 ANSWER 65 OF 76 USPATFULL on STN

AN 2000:98184 USPATFULL

TI Mammalian DNA primase screen and activity modulating agents

IN Kozlowski, Michael, Palo Alto, CA, United States

Aimi, Junko, San Carlos, CA, United States

PA Geron Corporation, Menlo Park, CA, United States (U.S. corporation)

PI US 6096499 20000801

AI US 1997-828192 19970321 (8)

RLI Continuation-in-part of Ser. No. US 1996-624343, filed on 22 Mar 1996, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Marschel, Ardin H.  
LREP Earp, David J.  
CLMN Number of Claims: 12  
ECL Exemplary Claim: 1  
DRWN 1 Drawing Figure(s); 4 Drawing Page(s)  
LN.CNT 1696

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides DNA primase assays suitable for identifying DNA primase modulating agents, methods of modulating DNA primase activity and compositions which modulate DNA primase.

L21 ANSWER 66 OF 76 USPATFULL on STN

AN 2000:64868 USPATFULL

TI Dihydropyridine-, pyridine-, benzopyran-4-one- and triazoloquinazoline derivative, their preparation and their use as adenosine receptor antagonists

IN Jacobson, Kenneth A., Silver Spring, MD, United States

Jiang, Ji-Long, North York, Canada

Kim, Yong-Chul, Rockville, MD, United States

Karton, Yishai, Ness-Ziona, Israel

Van Rhee, Albert M., Durham, NC, United States

PA The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

PI US 6066642 20000523

WO 9727177 19970731

AI US 1998-117598 19981207 (9)

WO 1997-US1252 19970129

19981207 PCT 371 date

19981207 PCT 102(e) date

PRAI US 1996-10737P 19960129 (60)

US 1996-21191P 19960703 (60)

DT Utility

FS Granted

EXNAM Primary Examiner: Kight, John; Assistant Examiner: Covington, Raymond

LREP Leydig, Voit & Mayer

CLMN Number of Claims: 33

ECL Exemplary Claim: 1

DRWN 12 Drawing Figure(s); 17 Drawing Page(s)

LN.CNT 3795

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides certain novel compounds, compositions, and a method of treating a mammal by blocking its adenosine receptors comprising administering at least one compound of the present invention. Examples of the present inventive compounds include certain flavonoids of formulae (I) and (II), wherein R.sub.1 to R.sub.4 are as defined in the description, and M is --CH(OH)--CH(R.sub.2)-- or --C(OH).dbd.C(R.sub.2)-- and R.sub.1, R.sub.2 are as defined in the description; or dihydropyridines of formula (III), wherein R.sub.2 to R.sub.6 are as defined in the description; or pyridines of formula (IV), wherein R.sub.2 to R.sub.6 are as defined in the description, or triazoloquinazolines of formula (V), wherein R.sub.1 and R.sub.2 are as defined in the description; and their derivatives, or pharmaceutically acceptable salts thereof.

L21 ANSWER 67 OF 76 USPATFULL on STN

AN 2000:18472 USPATFULL

TI Gastroprotective flavone/flavanone compounds with therapeutic effect on inflammatory bowel disease

IN Yoo, Moochi, Seoul, Korea, Republic of

Son, Mi Won, Kyoungki-do, Korea, Republic of  
Kim, Ik Yon, Kyoungki-do, Korea, Republic of  
Kim, Won Bae, Seoul, Korea, Republic of  
Kim, Soon Hoe, Kyoungki-do, Korea, Republic of  
Lee, Sang Deuk, Seoul, Korea, Republic of  
Lim, Geun Jho, Seoul, Korea, Republic of  
Lim, Joong In, Seoul, Korea, Republic of  
Ahn, Byoung Ok, Kyunggi-do, Korea, Republic of  
Baik, Nam Gi, Kyoungki-do, Korea, Republic of  
Kim, Dong Sung, Kyoungki-do, Korea, Republic of  
Oh, Tae Young, Kyunggi-do, Korea, Republic of  
Ryu, Byung Kwon, Seoul, Korea, Republic of  
Yang, Jae Sung, Seoul, Korea, Republic of  
Shin, Hee Chan, Seoul, Korea, Republic of

PA Dong a Pharmaceutical Co., Ltd., Korea, Republic of (non-U.S. corporation)

PI US 6025387 20000215  
WO 9804541 19980205

AI US 1999-214889 19990114 (9)  
WO 1997-KR144 19970725  
19990114 PCT 371 date  
19990114 PCT 102(e) date

PRAI KR 1996-30494 19960725

DT Utility  
FS Granted

EXNAM Primary Examiner: Richter, Johann; Assistant Examiner: Solola, Taofiq A.  
LREP Bachman & LaPointe, P.C.  
CLMN Number of Claims: 9  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1562

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel flavone/flavanone compounds or their pharmaceutically acceptable salts and process for preparation thereof for protecting gastrointestinal tracts against gastritis, ulcers and inflammatory bowel disease.

L21 ANSWER 68 OF 76 USPATFULL on STN

AN 1999:167038 USPATFULL

TI Flavonoid and biflavonoid derivatives, their pharmaceutical compositions, their anxiolytic activity

IN Cassels, Bruce Kennedy, Casilla, Chile  
Dajas, Federico Jose, Montevideo, Uruguay  
Medina, Jorge Horacio, Buenos Aires, Argentina  
Paladini, Alejandro Constantino, Buenos Aires, Argentina  
Silveira, Rodolfo Horacio, Montevideo, Uruguay

PA University of Strathclyde, United Kingdom (non-U.S. corporation)

PI US 6004998 19991221

AI US 1997-939975 19970929 (8)

RLI Division of Ser. No. US 586796

PRAI GB 1993-17071 19930817

DT Utility  
FS Granted

EXNAM Primary Examiner: Stockton, Laura L.  
LREP Alston & Bird LLP  
CLMN Number of Claims: 3  
ECL Exemplary Claim: 1  
DRWN 19 Drawing Figure(s); 19 Drawing Page(s)  
LN.CNT 637



## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Certain flavonoids, notably derivatives of flavone, chrysin and apigenin, together with dimers thereof such as amentoflavone, have been found to possess anxiolytic properties (i.e., anxiety reducing properties) without exhibiting a sedative effect. Novel compounds and pharmaceutical formulations are also described.

L21 ANSWER 69 OF 76 USPATFULL on STN

AN 1999:113557 USPATFULL

TI Methods of screening foods for nutraceuticals

IN Ghai, Geetha, Murray Hill, NJ, United States

Boyd, Charles, New Brunswick, NJ, United States

Csiszar, Katalin, New Brunswick, NJ, United States

Ho, Chi-Tang, East Brunswick, NJ, United States

Rosen, Robert T., Pottersville, NJ, United States

PA Rutgers, The State University of New Jersey, New Brunswick, NJ, United States (U.S. corporation)

PI US 5955269 19990921

AI US 1996-670826 19960620 (8)

DT Utility

FS Granted

EXNAM Primary Examiner: Myers, Carla J.

LREP Pennie & Edmonds LLP

CLMN Number of Claims: 43

ECL Exemplary Claim: 1

DRWN 1 Drawing Page(s)

LN.CNT 2189

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to an assay system for screening nutraceuticals, i.e., foods or food substances that occur naturally, or that are produced during processing which are capable of modulating in a subject the expression of one or more genes associated with a disease or undesirable physical condition. The nutraceuticals identified by the screening assays can be incorporated into compositions which may be administered to a subject to treat or prevent a disease or undesirable condition, or otherwise to improve the health of the subject. The invention further provides methods for modifying the amount of nutraceuticals in raw and processed foods or food substances.

L21 ANSWER 70 OF 76 USPATFULL on STN

AN 1998:57962 USPATFULL

TI Flavonoid and biflavonoid derivatives, their pharmaceutical compositions, their anxiolytic activity

IN Cassels, Bruce Kennedy, Casilla, Chile

Dajas, Federico Jose, Montevideo, Uruguay

Medina, Jorge Horacio, Buenos Aires, Argentina

Paladini, Alejandro Constantino, Buenos Aires, Argentina

Silveira, Rodolfo Horacio, Montevideo, Uruguay

PA University of Strathclyde, United Kingdom (non-U.S. corporation)

PI US 5756538 19980526

WO 9505169 19950223

AI US 1996-586796 19960531 (8)

WO 1994-GB1803 19940817

19960531 PCT 371 date

19960531 PCT 102(e) date

PRAI GB 1993-17071 19930817

DT Utility

FS Granted

EXNAM Primary Examiner: Richter, Johann; Assistant Examiner: Stockton, Laura

L.

LREP Bell Seltzer Intellectual Property Law Group of Alston & Bird LLP  
CLMN Number of Claims: 16  
ECL Exemplary Claim: 1  
DRWN 19 Drawing Figure(s); 19 Drawing Page(s)  
LN.CNT 664

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Certain flavonoids, notably derivatives of flavone, chrysin and apigenin, together with dimers thereof such as amentoflavone, have been found to possess anxiolytic properties (i.e., anxiety reducing properties) without exhibiting a sedative effect. Novel compounds and pharmaceutical formulations are also described.

L21 ANSWER 71 OF 76 USPATFULL on STN

AN 97:59052 USPATFULL

TI Methods of identifying drugs with selective effects against cancer cells

IN Vande Woude, George F., Berryville, VA, United States

Koo, Han-Mo, Gaithersburg, MD, United States

Monks, Anne, Clarksburg, MD, United States

PA The United States of America as represented by the Department of Health and Human Services, Washington, DC, United States (U.S. government)

PI US 5645988 19970708

AI US 1994-260515 19940615 (8)

RLI Continuation-in-part of Ser. No. US 1993-169962, filed on 20 Dec 1993 which is a continuation of Ser. No. US 1992-880525, filed on 8 May 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-696923, filed on 8 May 1991, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Ketter, James S.

LREP Leydig, Voit &amp; Mayer, Ltd.

CLMN Number of Claims: 19

ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 1624

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention involves a method of identifying drugs which selectively inhibit the growth of particular cancer cells, which method comprises: (a) contacting with the drug at least two cancer cells derived from the same type of biological material, wherein the cancer cells differ as to the presence of a particular DNA sequence, (b) measuring the effect of the drug on the growth of the cancer cells, and (c) determining whether there is a correlation between the effect of the drug on the cancer cells and the presence or absence of the DNA sequence in the cancer cells. The present invention further involves the use of such drugs.

L21 ANSWER 72 OF 76 USPATFULL on STN

AN 94:112736 USPATFULL

TI Compositions for treating fat deposits in humans

IN Bombardelli, Ezio, Milan, Italy

PA Indena S.p.A., Milan, Italy (non-U.S. corporation)

PI US 5376371 19941227

AI US 1990-603141 19901025 (7)

PRAI IT 1989-2217489 19891027

DT Utility

FS Granted

EXNAM Primary Examiner: Russel, Jeffrey E.; Assistant Examiner: Gitomer, Ralph

LREP Mathews, Woodbridge &amp; Collins

CLMN Number of Claims: 7  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 250

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Pharmaceutical and cosmetic compositions for the treatment of superfluous fat deposits contain (a) vegetable active principles having adenylate cyclase agonistic activity or (b) vegetable active principles having antiphosphodiesterase activity or a combination of the two kinds of active principles (a) and (b).

L21 ANSWER 73 OF 76 USPATFULL on STN

AN 94:1453 USPATFULL  
TI Methods of treating tumors with compositions of catecholic butanes  
IN Neiss, Edward S., Denver, CO, United States  
Allen, Larry M., Golden, CO, United States  
Jordan, Russell T., Fort Collins, CO, United States  
PA Block/Chemex, G.P., Jersey City, NJ, United States (U.S. corporation)  
PI US 5276060 19940104  
AI US 1991-685609 19910415 (7)  
RLI Division of Ser. No. US 1987-57481, filed on 3 Jun 1987, now patented, Pat. No. US 5008294 which is a continuation-in-part of Ser. No. US 1987-52420, filed on 4 May 1987, now abandoned which is a continuation of Ser. No. US 1985-699923, filed on 11 Feb 1985, now abandoned which is a continuation-in-part of Ser. No. US 1984-578501, filed on 9 Apr 1984, now abandoned which is a continuation-in-part of Ser. No. US 1983-465631, filed on 10 Feb 1983, now abandoned which is a continuation-in-part of Ser. No. US 1982-365781, filed on 5 Apr 1982, now abandoned which is a continuation-in-part of Ser. No. US 1979-49886, filed on 19 Jun 1979, now abandoned

DT Utility  
FS Granted  
EXNAM Primary Examiner: Rollins, John W.  
LREP Kenyon & Kenyon  
CLMN Number of Claims: 2  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 825

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to methods useful in the treatment of benign, premalignant and malignant solid tumors, especially those of the skin comprising methods for the administration of pharmacologically active compositions containing catecholic butanes. The invention also relates to methods of preventing the occurrence of tumors, and the use of catecholic butanes as a sunscreensing agent. The preferred catecholic butane is nordihydroguaiaretic acid. The preferred methods of application of the compositions containing catecholic butanes are by topical application and intratumor injection.

L21 ANSWER 74 OF 76 USPATFULL on STN

AN 91:68875 USPATFULL  
TI Complex compounds of bioflavonoids with phospholipids, their preparation and use, and pharmaceutical and cosmetic compositions containing them  
IN Bombardelli, Ezio, Milan, Italy  
Patri, Gian F., Milan, Italy  
PA Indena S.p.A., Milan, Italy (non-U.S. corporation)  
PI US 5043323 19910827  
AI US 1988-143470 19880112 (7)  
PRAI IT 1987-19081 19870114

DT Utility  
FS Granted  
EXNAM Primary Examiner: Rollins, John W.  
LREP Bucknam and Archer  
CLMN Number of Claims: 18  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 585

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Complex compounds of flavonoids with phospholipids, characterized by high lipophilia and improved bio-availability and therapeutic properties as compared with free, not complexed flavonoids. The complex compounds of the invention are suitable for use as the active principle in pharmaceutical and cosmetic compositions.

L21 ANSWER 75 OF 76 USPATFULL on STN

AN 89:92343 USPATFULL

TI Compositions of catecholic butanes with zinc

IN Jordan, Russell T., Fort Collins, CO, United States

PA Chemex Pharmaceuticals, Inc., Denver, CO, United States (U.S. corporation)

PI US 4880637 19891114

AI US 1986-924620 19861028 (6)

DCD 20050927

RLI Continuation-in-part of Ser. No. US 1985-699923, filed on 11 Feb 1985, now abandoned which is a continuation-in-part of Ser. No. US 1984-578501, filed on 9 Apr 1984, now abandoned which is a continuation-in-part of Ser. No. US 1983-465631, filed on 10 Feb 1983, now abandoned which is a continuation-in-part of Ser. No. US 1982-365781, filed on 5 Apr 1982, now abandoned which is a continuation-in-part of Ser. No. US 1979-49886, filed on 19 Jun 1979, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Rollins, John W.

LREP Kenyon & Kenyon

CLMN Number of Claims: 25

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1185

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides new compositions comprising catecholic butanes and ionic zinc. The invention also relates to pharmacologically active compositions comprising said new compositions, which are useful in the treatment of benign, premalignant and malignant solid tumors, especially those of the skin. The ionic zinc may be in the form of a zinc salt, and the preferred catecholic butane is nordihydroguaiaretic acid.

L21 ANSWER 76 OF 76 USPATFULL on STN

AN 88:62483 USPATFULL

TI Modification of plant extracts from zygophyllaceae and pharmaceutical use therefor

IN Jordan, Russell T., Fort Collins, CO, United States

PA Chemex Pharmaceuticals, Inc., Denver, CO, United States (U.S. corporation)

PI US 4774229 19880927

AI US 1986-860654 19860507 (6)

RLI Continuation of Ser. No. US 1982-365784, filed on 5 Apr 1982, now

abandoned which is a continuation-in-part of Ser. No. US 1979-49886,  
filed on 19 Jun 1979, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Rollins, John

LREP Kenyon & Kenyon

CLMN Number of Claims: 21

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 835

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A mixture of an extract from a plant belonging to the Zygophyllaceae family containing phenolic compositions and a nonalkali metal salt is useful as a pharmaceutical agent, for example, in the treatment of cancer, nonmalignant tumors, osteomyelitis, psoriasis and warts.